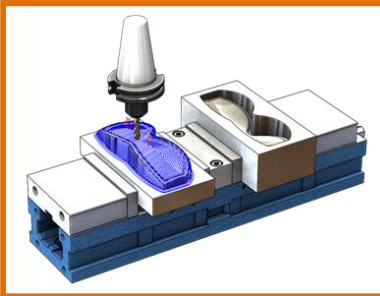
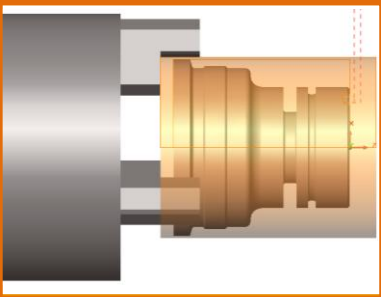
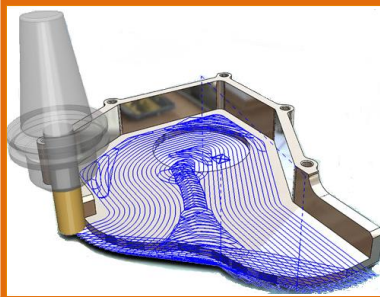
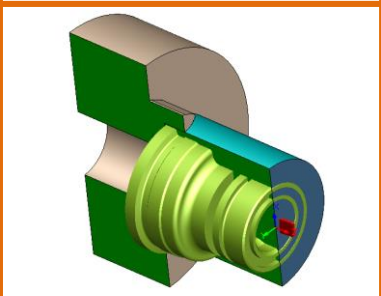
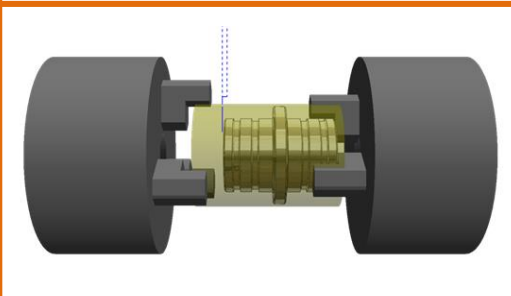
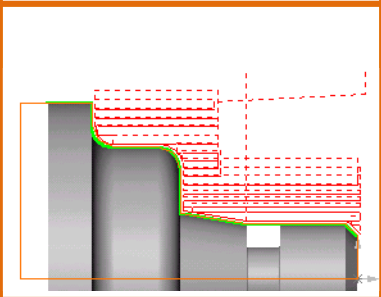
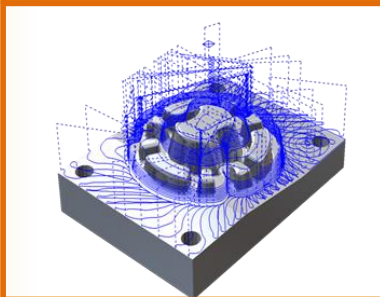
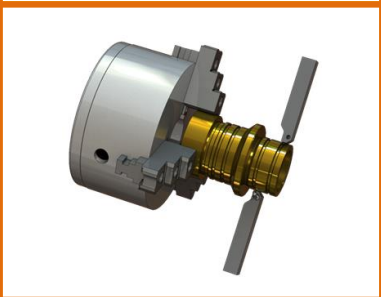
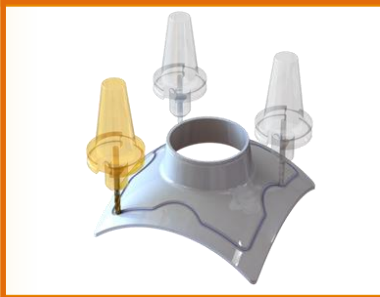
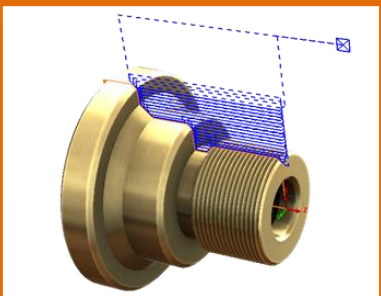




CAMWorks[®]
A Geometric Product



**CAMWorks
2014
Installation
&
License
Activation
Guide**



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FeatureManager™ is a trademark owned jointly by DS SolidWorks and Bentley Systems, Inc.

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CAMWorks 2014 SP1
December 01, 2013



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**INSTALLATION
&
LICENSE
ACTIVATION
SECTION**



1. CAMWORKS: INTRODUCTION

What is CAMWorks?

CAMWorks is a CAM application developed by Geometric Americas, Inc. It is fully integrated into the CAD solid modeler of SolidWorks and/or CAMWorks Solids and works within the SolidWorks/CAMWorks Solids environment. As a result of the integration of SolidWorks/CAMWorks Solids and CAMWorks, you can:

- Use the same user interface (Windows) for design and CAM.
- Use the same part file for storing the design and the machining information (machinable features, operations and toolpaths).
- Eliminate file transfers using time-consuming standard file formats such as IGES, SAT and Parasolid. The IGES and SAT file formats are a close approximation of the part within a tolerance and as such are prone to errors.
- Generate toolpaths on the actual SolidWorks/CAMWorks Solids part, not on an imported approximation.
- Generate toolpaths that are associative with SolidWorks/CAMWorks Solids. This means that if the design model is changed, the toolpaths are changed automatically with minimal user intervention.

This chapter explains how to install CAMWorks and activate your CAMWorks license.

Purchasing CAMWorks License

You need to purchase a software license or hardware dongle in order to use the CAMWorks application.

Geometric Americas, Inc. sells CAMWorks and related program modules through a worldwide network of **Value Added Resellers**. You need to pay an applicable license fee in order to purchase the desired license.

If you are an **existing user** of CAMWorks, you can contact your Reseller for CAMWorks.

If you are a **first-time user** of CAMWorks, you can find your local CAMWorks Reseller on www.CAMWorks.com.



Update Support Plan (USP)

When you purchase CAMWorks through a CAMWorks Reseller, you will receive a CAMWorks license required to run the CAMWorks application. In addition to this, you also have an option to purchase the CAMWorks *Update Support Plan* (USP) for a specific duration.

Being enrolled in the *Update Support Plan* for CAMWorks enables you to receive the latest updates on CAMWorks as well as receive technical support.

Once your USP expires, ensure that you repurchase the Update Support Plan from your CAMWorks Reseller to continue receiving technical support and updates.

Scope of this manual

This manual has been designed to be as informative as possible. It provides instructions on how to:

- Install the *CAMWorks* application
- Activate your *CAMWorks* license
- Update the CAMWorks installation, license and Technology Database
- Troubleshoot

Installing CAMWorks

After you purchase the *CAMWorks* license, you need to register online on the [CAMWorks website](#). Once you register, you will be provided with the permissions required to access the *Downloads* section of the [CAMWorks website](#). The Downloads section of the CAMWorks website contains the installers for the *CAMWorks* application and associated files.

Getting Help/Troubleshooting: CAMWorks Support

In case you face any issues related to installation, license activation or using *CAMWorks*, you can contact your CAMWorks Reseller or write back to us at:

support@camworks.com



2. SYSTEM REQUIREMENTS

This chapter details the system requirements (both Hardware and Software) for the CAMWorks 2014 application.

Before installing CAMWorks 2014, you need to ensure that the following system requirements are fulfilled.

Supported Microsoft Windows® Operating Systems

For CAMWorks 2014 (32-bit)

- 32-bit and 64-bit versions of Windows Vista
- 32-bit and 64-bit versions of Windows 7

For CAMWorks 2014 (64-bit)

- 64-bit version of Windows Vista
- 64-bit version of Windows 7
- 64-bit version of Windows 8

Note: CAMWorks 2014 does not support the Windows XP operating system.

Supported Solid Modelers

Since CAMWorks runs within the SolidWorks or CAMWorks Solids environment, the system requirements are basically the same as for SolidWorks.

For CAMWorks 2014 (32-bit)

- SolidWorks 2013
- SolidWorks 2014
- CAMWorks Solids 2013
- CAMWorks Solids 2014

For CAMWorks 2014 (64-bit)

- SolidWorks 2013
- SolidWorks 2014
- CAMWorks Solids 2013
- CAMWorks Solids 2014

Note:

- SolidWorks 2012 and CAMWorks Solids 2012 are not supported in this version.
-



Network

- Microsoft's Windows Networking and Active Directory network environments.

Note: **Novell networks and non-Windows based network storage devices are neither tested nor recommended.**

Hardware

- **Platform:** Intel® and AMD® processors.

Note: **Intel® Pentium® 3, AMD Athlon™ and Athlon XP CPUs are not supported.**

- **RAM:** Minimum: 1GB (Recommended: 2GB or more)
- **Video card:** A certified OpenGL workstation graphics card and driver. See the SolidWorks website for more information.
- **CAMWorks Hardware Dongle:** This dongle is required only when using a hardware device for CAMWorks Licensing (one for each CAMWorks license purchased). Such a dongle will be provided to you by your CAMWorks Reseller.

Software Requirements

Essential softwares required before installing CAMWorks

SolidWorks® or CAMWorks Solids

CAMWorks runs as an Add-in within the Solid modeler environment of SolidWorks® or CAMWorks Solids. Refer to the first page of this chapter for the [list of supported solid modelers](#).

Microsoft Access®

Based on whether you have a 32-bit or 64-bit system, the *CAMWorks* application requires any one of the following versions of Microsoft Access for the functioning of its database (Technology Database™):

- Access 2003 (32-bit version)
- Access 2007 (32-bit version)
- Access 2007 Runtime (32-bit version)
- Access 2010 (32-bit version)
- Access 2010 SP1 (64-bit version)
- Access 2013 (32-bit or 64-bit version)



If a supported version of *Microsoft Access* is not detected on the system during the *CAMWorks* installation process, then a Run-time version of Access 2007 will be automatically installed by the *CAMWorks* installer.

Adobe Reader

The *CAMWorks* Manuals are in PDF format. The Adobe Reader application is necessary to view, read, navigate, search and print the *CAMWorks* Manuals.

If you do not have the Adobe Reader installed, you can download it from the Adobe web site: www.adobe.com.

After *CAMWorks* is installed, to access the *CAMWorks* Tutorials, select **Start** on the Windows taskbar and select **Programs>>CAMWorks2014>>Manuals**.

Other Essential Softwares depending on Machine Configuration

x64 Hardware Driver(Itanium)

If your PC on which you run *CAMWorks* is a computer with a 64-bit Intel® Itanium® processor, then you need to install the x64 Hardware Driver (Itanium). If your PC does not have this processor type, then this Program option will be grayed out. This driver can be downloaded from the [CAMWorks website](#).



3. INSTALLING CAMWORKS

This chapter provides details on how to install the CAMWorks 2014 application. This chapter covers the following topics:

- [CAMWorks Installation Information](#)
- [Installing CAMWorks by downloading installer from the CAMWorks website](#)
- [Activating the CAMWorks License](#)
- [Starting CAMWorks](#)
- [Customized Post Processors](#)
- [The Importance of backing up CAMWorks data](#)
- [Installing Optional Programs](#)

CAMWorks Installation Info

Supported Languages

CAMWorks is available in the following 12 languages:

- | | | |
|------------------------|-----------------------|-----------|
| • English | • Polish | • Russian |
| • French | • Japanese | • Spanish |
| • German | • Chinese | • Turkish |
| • Portuguese-Brazilian | • Chinese Traditional | • Italian |

Note: When you install CAMWorks, the English language version is always installed. To install CAMWorks in other languages, make the selection in the Installation Wizard when prompted.

Latest CAMWorks Version

The latest version of CAMWorks 2014 available on the CAMWorks website is **CAMWorks 2014 SP1**.

You need to [download the installer](http://www.camworks.com) for this version from the CAMWorks website (<http://www.camworks.com>).



CAMWorks Setup Program

The CAMWorks installer installs the following:

- CAMWorks system files.
- Technology Database files.
- Sample part models and assemblies.
- Tutorial post processors. (To obtain [customized post processors](#) for your machine tools, contact your CAMWorks Reseller.)
- *Microsoft Access 2007 Runtime SP2* version. (This will be installed only if no compatible version of *Microsoft Access* is detected on your system.)
- The manuals in Adobe PDF format.
- The *CAMWorks Feed and Speed Library*. (This library will be installed only if user selects it for installation during the Installation process.)
- The *Hardware Dongle License Driver (Sentinel 7.6.6)*.
- The *CAMWorks License Manager*, *CAMWorks (X) Connect*, *CAMWorks Virtual Machine* and *CAMWorksView* utilities. (These utilities will be installed automatically only if CAMWorks is downloaded and installed by [Direct Access](#).)

Location of Files after installation

When you install CAMWorks, the application files and data files will be installed in two locations:

Location of Application files

- On 32-bit systems, the application files can be installed in any folder
E.g.: Drive:\Program Files\CAMWorks2014
- On 64-bit systems, the application files can be installed in any folder
E.g.: Drive:\Program Files\CAMWorks2014x64

Location of Data Files

- On 32-bit systems, the data files can be installed in a different user-defined folder. *E.g.: Drive:\CAMWorksData\CAMWorks2014*
- On 64-bit systems, the data files can be installed in a different user-defined folder. *E.g.: Drive:\CAMWorksData\CAMWorks2014x64*

Note that if you are installing CAMWorks on a Windows Vista or Windows 7 machine, then these data files, which require write permissions, must be installed in a folder other than Program Files. Data files include example parts, training parts/assemblies, posts, mill tooling, API files, EDM cutting



conditions, machine simulators, TechDBForms.mde, TechDB.mdb and ReportDatabase.mdb.

Disabling Antivirus Programs before Installation

We recommend you completely disable all antivirus programs running on your computer. Antivirus programs, such as McAfee, Norton, AVG, ZoneAlarm, etc., may block or otherwise interfere with the program installation. An example of a failed installation can be an error message indicating several .dll files failing to self-register or unregister.

There are different methods of disabling antivirus programs depending on whether you are running only virus scan software, a complete security suite or an enterprise antivirus product. If you are running a security suite, it may be necessary to disable the entire suite (e.g., antivirus, firewall, antispyware). Refer to the Antivirus product documentation for more information.

Software Programs installed along with CAMWorks

When you install *CAMWorks 2014*, the following software programs are also automatically installed along with it.

- [CAMWorks License Manager](#)
- [Hardware Dongle License Driver \(Sentinel 7.6.6\)](#)
- [CAMWorks \(X\) Connect](#)
- [CAMWorks Virtual Machine](#)
- [CAMWorksView](#)
- [CAMWorks Feed and Speed Library](#)
- [Microsoft Access 2007 Runtime SP2 Version](#)

Separate installers for all these software programs are also available for download in the *Downloads Area* of the [CAMWorks website](#).

Note:

- The *CAMWorks License Manager* and *Hardware Dongle License Driver (Sentinel 7.6.6)* are essential for the licensing mechanism of CAMWorks.
- The *CAMWorks (X) Connect*, *CAMWorksView* and *CAMWorks Virtual Machine* software programs work in a complementary capacity to CAMWorks.
- Installation of the *CAMWorks Feed and Speed Library* is optional.
- The *CAMWorks License Manager*, *CAMWorks (X) Connect*, *CAMWorksView* and *CAMWorks Virtual Machine* programs will be installed automatically only if CAMWorks is downloaded and installed by [Direct Access](#).



Software programs related to Licensing Mechanism

CAMWorks License Manager

The *CAMWorks License Manager* utility is a built-in License Management mechanism for CAMWorks which is applicable to both [FlexLM Software](#) as well as [Hardware Dongle](#) Licensing methods.

For more details, read: [CAMWorks License Manager](#) in the next chapter.

Hardware Dongle License Driver (Sentinel Driver 7.6.6)

The Hardware Dongle License Driver is required in order to enable CAMWorks to read the dongle if you have purchased a standalone CAMWorks license that uses the [Hardware Dongle device as the Licensing method](#).

For more details, read: [Hardware Dongle License Driver \(Sentinel Driver 7.6.6\)](#) in the next chapter.

Software Programs that complement the CAMWorks application

CAMWorks (X) Connect

The *CAMWorks (X) Connect* utility enables you to generate multiple multiaxis toolpaths without locking up your local computer's processing power. To use *CAMWorks (X) Connect*, you require an Internet connection and your [CAMWorks license](#) must be programmed for 5 Axis Machining.

In case you do not plan to use this application, you can uninstall it from the *Uninstall Programs* section of the *Windows Control Panel*.

You need to purchase CPU processing time for generating multiaxis toolpaths using CAMWorks (X) Connect. To purchase CPU processing time, you can either contact your CAMWorks Reseller or buy it online.

CAMWorks Virtual Machine

The *CAMWorks Virtual Machine* is a new Machine Simulation application introduced with *CAMWorks 2014*. It virtually simulates the NC codes in actual machining environment. This will help the user to check for possible collisions with machine components and to verify potential issues in the NC program. The *CAMWorks Virtual Machine* application is automatically installed when you install *CAMWorks 2014*. However, in order to run this Machine Simulation application, your [CAMWorks license](#) must be programmed to run the *CAMWorks Virtual Machine* module.

Contact your CAMWorks Reseller if you wish to purchase the [CAMWorks module](#) required to run the *CAMWorks Virtual Machine* application.



CAMWorksView

CAMWorksView 3D viewer application which enables the user to review CAMWorks toolpath operations data along with the 3D models of stock, Work-in-process (WIP) and the finished part model. It enables users to zoom/pan/rotate **.JT** models and to take simple sections.

In case you do not plan to use this application, you can uninstall it from the *Uninstall Programs* section of the *Windows Control Panel*.

CAMWorksView is a free 3D Viewer application. Hence, you do not require a separate license to use this application.

Software Programs optionally installed while installing CAMWorks

CAMWorks Feed and Speed Library

The *CAMWorks Feed and Speed Library* provides over 1.7 million feed and speed combinations that represent over 1100 materials. Use of the feed/speed data is optional. In its absence, CAMWorks will either use the feed and speed data defined by the user or the data stored with the tool.

When you install CAMWorks, the *Installation Wizard* will scan your system to detect the presence of the *CAMWorks Feed and Speed Library*. If not detected, the *Installation Wizard* will prompt you to select whether or not you wish to install the *CAMWorks Feed and Speed library*. Click *Yes* to install or *No* to proceed without installing the library.

Alternatively, the *CAMWorks Feed and Speed library* can be downloaded and installed from the *Downloads Area* (*CAMWorks Downloads* section) of the [CAMWorks website](#).

To use this library, your CAMWorks License must be programmed to use

Microsoft Access 2007 Runtime SP2 Version

When you install CAMWorks, the *Installation Wizard* will scan your system to detect the presence of a [supported version of Microsoft Access](#). If not detected, then the *Installation Wizard* will prompt you to select whether or not you wish to install a Runtime version of *Microsoft Access 2007*. Click *Yes* to install. Since Microsoft Access is a pre-requisite for installing CAMWorks, note that the CAMWorks Installation will be terminated if you choose not to install Microsoft Access Runtime version.

Alternatively, the Runtime version of *Microsoft Access 2007* can be downloaded and installed from the *Downloads Area* (*Miscellaneous Downloads* section) of the [CAMWorks website](#).



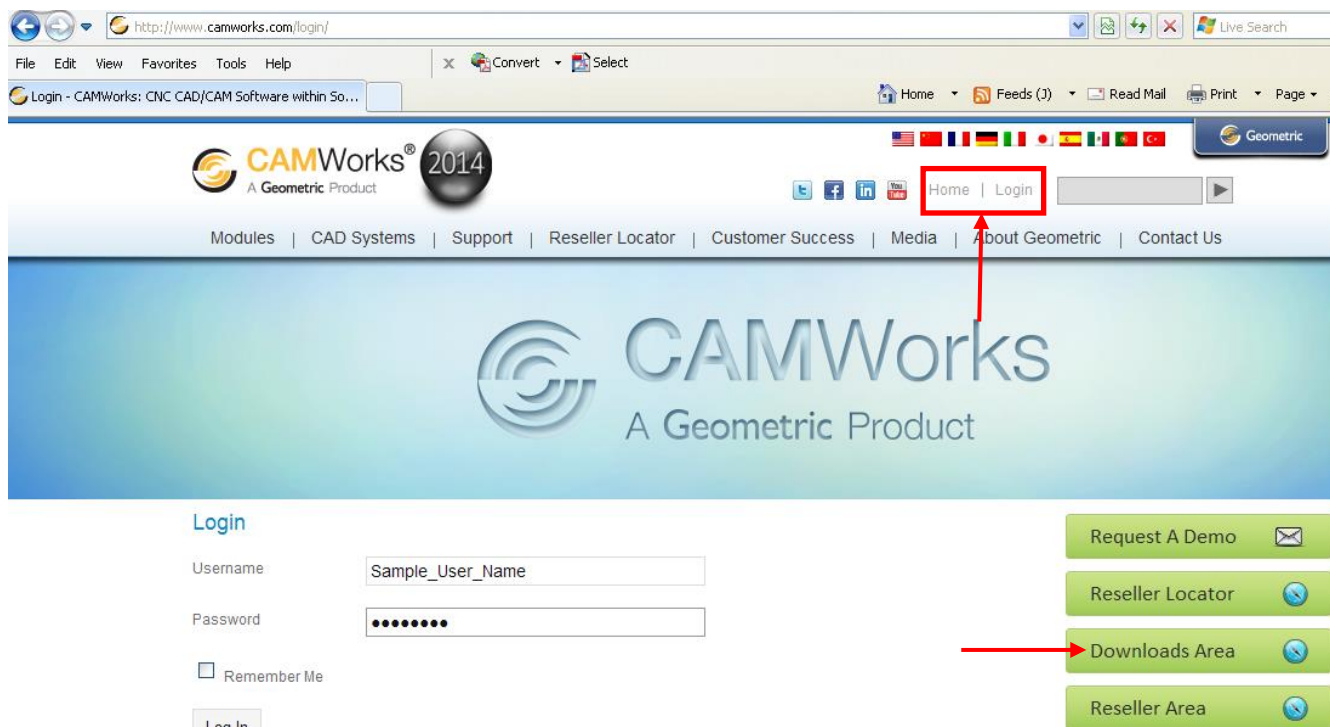
Installing CAMWorks by Downloading Installer

CAMWorks versions are released annually. [Service Packs](#) containing enhancements and features for CAMWorks are released periodically. The installers for the latest CAMWorks Versions with service packs are available on the [CAMWorks website](#). We recommend that you keep your CAMWorks installation up-to-date by downloading and installing the latest CAMWorks version.

Step 1: Downloading the CAMWorks Installer from the Website

Once you pay the applicable license fees, your CAMWorks Reseller will provide you with the permissions (Login ID and Password) required for accessing the *Downloads* section of the CAMWorks website. The installers for *CAMWorks* application and associated files and utilities are available on this website.

1. Open the website www.CAMWorks.com.
2. Login using the **Username** and **Password** provided to you by your CAMWorks Reseller.
3. After successfully logging in, click on the **Downloads Area** button on the right. The *Customer Area* webpage will be displayed.



Login on the CAMWorks website





4. Click on the link for **CAMWorks Downloads**.

The screenshot shows the CAMWorks Customer Area webpage. At the top, there is a navigation bar with the CAMWorks logo, the text 'CAMWorks: CNC CAD/CAM Software within So...', a speech bubble icon with '146', a '+ New' button, and a 'SEO' button. Below the navigation bar, the page title is 'Customer Area'. The main content area starts with a welcome message: 'Welcome to the CAMWorks Customer Area'. It then states: 'Here you can find the download links for CAMWorks, CAMWorks Solids, and other miscellaneous files.' and 'We hope the Customer Area provides the information you require and we welcome any feedback or suggestions for improvements.' Below this, there is a section for submitting assistance requests: 'Submit if assistance is required with a licensing/ registration issue for a purchased product'. A list of links is provided: 'CAMWorks Downloads' (highlighted with a red box), 'CAMWorks Solids files', and 'CAMWorks Nesting Files'. Each link has a corresponding description: 'Access the latest CAMWorks files', 'Access the latest CAMWorks Solids files', and 'Download the latest CAMWorks Nesting files'.

Click on the link for 'CAMWorks Downloads' on the web page

5. The *CAMWorks Downloads* webpage is displayed. Click on the link for **CAMWorks 2014 SP 1.0**.
6. Clicking on this hyperlink takes you to the section of the webpage containing links to download the following files associated with CAMWorks 2014.

This webpage contains the following files related to *CAMWorks*:








- i. **32-bit installer** of *CAMWorks* in .zip format.
 - ii. **64-bit installer** of *CAMWorks* in .zip format.
 - iii. **What's New** document in PDF format. (List of new features and functionalities for CAMWorks 2014)
 - iv. **Release Notes** for 32-bit installer.
 - v. **Release Notes** for 64-bit installer.
 - vi. **Installation Guide** document in PDF format.
 - vii. **Resolved Issues** list
 - viii. **CAMWorks Virtual Machine 2014** in .exe format.
7. Based on whether your system is 32-bit or 64-bit, you need to download the 32-bit ( CAMWorks2014-SP1.zip) or 64-bit ( CAMWorks2014x64-SP1.zip) **.zip** file package containing the installer for CAMWorks 2014.

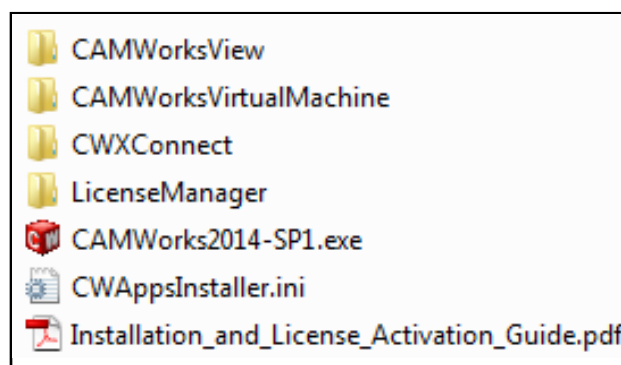


8. The **.zip** file can be downloaded directly on to the hard drive of the system on which you intend to run CAMWorks or it can be downloaded on a Network drive.

Step 2: Unzip the downloaded file



After you download the 32-bit or 64-bit installer (which is in .zip file format) from the CAMWorks website, unzip the downloaded file. The unzipped folder will contain the following:

1. The **CAMWorksView** folder containing the installation files ( CAMWorksView2014.exe) for [CAMWorksView](#) utility.
2. The **CAMWorksVirtualMachine** folder containing the installer ( CAMWorksVirtualMachine2014.exe) for the [CAMWorks Virtual Machine](#) utility.
3. The **CWXConnect** folder containing the installer ( CWXConnect.msi) for [CAMWorks \(X\) Connect](#) utility.
4. The **LicenseManager** folder containing the installer ( CWLicenseManager.exe) for the [CAMWorks License Manager](#) utility.
5. The 32-bit installer ( CAMWorks2014-SP1.exe) or 64-bit installer ( CAMWorks2014x64-SP1.exe) for installing the CAMWorks application.
6. A Configuration settings file ( CWAppsInstaller.ini).
7. The **Installation_and_License_Activation_Guide** in PDF format which explains how to install CAMWorks as well as how to activate the CAMWorks License.



Contents of the Downloaded Zip Folder

Step 3: Run the Installer

From the unzipped folder, run the *CAMWorks2014* installer ( CAMWorks2014-SP1.exe or  CAMWorks2014x64-SP1.exe) to install the application. Follow the simple instructions given in the *Installation Wizard* to complete the installation process.



Installation by Direct Access

- If you have downloaded the zipped folder containing the CAMWorks executable directly on to system intended to run the CAMWorks application, then unzip the folder first. Run the *CAMWorks2014* installer (.exe) in order to install *CAMWorks* application.
- If you have downloaded the zipped folder containing the CAMWorks executable on to a Network drive, then copy the zipped folder or its contents to the Hard Drive of the system on which you intend to run CAMWorks. After unzipping the folder, run the *CAMWorks2014* installer (.exe) in order to install *CAMWorks* application.

When you install CAMWorks by direct access, the [CAMWorks License Manager](#), [CAMWorks \(X\) Connect](#), [CAMWorksView](#), and [CAMWorks Virtual Machine](#) utilities will also be installed along with this application.

Installation by Network Access

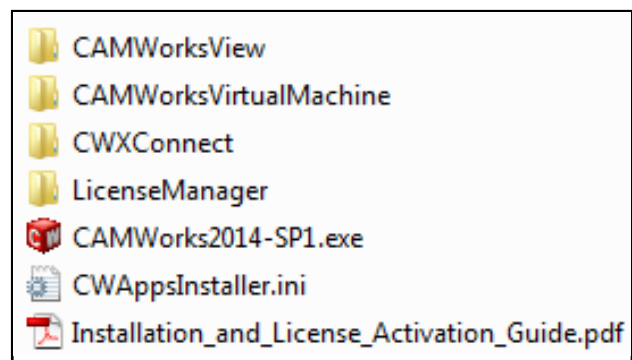
If you have downloaded the zipped folder containing the CAMWorks executable on to a Network drive, you can remote access the network drive from the system intended to run CAMWorks. Unzip the downloaded folder and run the *CAMWorks2014* installer (.exe) in order to install *CAMWorks* application. As the installer is accessed over a network, only the CAMWorks application will be installed on the system.

The *CAMWorks License Manager*, *CAMWorks (X) Connect*, *CAMWorks Virtual Machine* and *CAMWorksView* utilities will not be installed automatically. To install these utilities, you need to run the respective installers present in the folders of the unzipped folder.

Example:

Run the ***CWLicenseManager.exe*** present in the *LicenseManager* folder within the unzipped folder in order to install the *CAMWorks License Manager* utility.

Once the *CAMWorks* application and the *CAMWorks License Manager* utility are installed, you can proceed to activate the CAMWorks license based on your license type.



Contents of the Downloaded Zip Folder



Activating the CAMWorks License

The *CAMWorks* application requires a valid license in order to run it.

If you wish to use *CAMWorks*, you need to purchase a **CAMWorks license** from an authorized CAMWorks Reseller. The CAMWorks license can be standalone (for single-user) or floating (for multiple users) in nature.

Based on the license type that you have purchased, read the applicable section to learn how to activate your *CAMWorks* license.

- To understand the various types of CAMWorks licenses available, read: [Chapter 4: The CAMWorks License](#)
- If you want to activate a Standalone license using Software encryption, read: [Chapter 5: Activating the Standalone License using FlexLM Software](#)
- If you want to activate a Standalone license using Hardware Dongle, read: [Chapter 6: Activating the Standalone License using Hardware Dongle](#)
- If you want to activate a Floating license, read: [Chapter 7: Activating the Floating License](#)

Launching CAMWorks within the Solid Modeler


CAMWorks is fully integrated into *SolidWorks/CAMWorks Solids* and can be launched automatically as an Add-In in the *SolidWorks/CAMWorks Solids* environment.

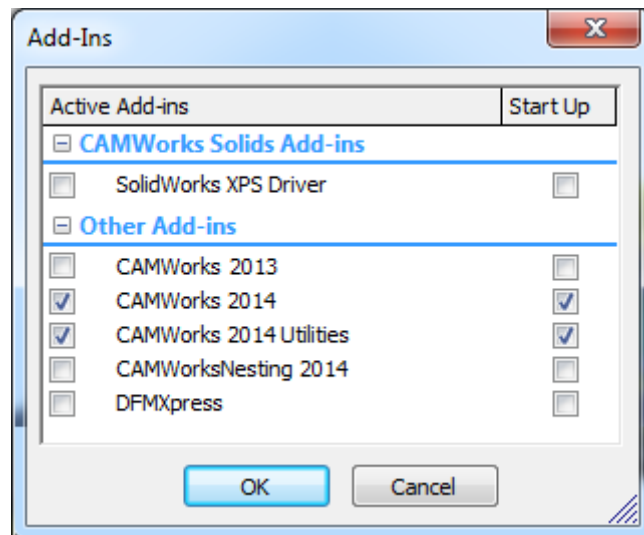
1. After you install *CAMWorks 2014*, activate the *CAMWorks* License in case it is not already activated.
2. Start *SolidWorks/CAMWorks Solids*. The *CAMWorks* logo will display to indicate that *CAMWorks 2014* has also been launched as an Add-In within the *SolidWorks/CAMWorks Solids* environment.



The CAMWorks logo displayed when it is launched within SolidWorks



3. If the *CAMWorks* logo does not display, it usually indicates that *CAMWorks* was not launched as an Add-In within SolidWorks/CAMWorks Solids. In such a case:
 - i. Click on the  **Options** button on SolidWorks/CAMWorks Solids and select **Add-Ins** from the dropdown menu.
 - ii. The **Add-Ins** dialog box is displayed. If *CAMWorks 2014* is listed in **Active Add-Ins**, then it indicates that it was successfully installed.
 - iii. Place a check in the checkbox to the left of *CAMWorks 2014* listed in *Active Add-Ins*.
 - iv. Click **OK** to close the dialog box. *CAMWorks 2014* will now be launched within the SolidWorks/CAMWorks Solids environment.



Add-Ins Manager of SolidWorks/ CAMWorks Solids

4. Open a part file or start a new part document in SolidWorks/CAMWorks Solids.

The CAMWorks Command Manager will display in the Command Manager area. Tabs for accessing the CAMWorks machining trees are available in the vertical toolbar on the left.

Optionally, you can adjust width of the tree. Position the cursor on the line that divides the tree from the graphics area. When the cursor changes to a bar, drag the bar to the right.

To learn how to use CAMWorks, we recommend that you go through the exercises in this manual and in the tutorials. To open a tutorial, select Start on the Windows Task bar, then select *Programs>>CAMWorks 2014>>Manuals* and pick the applicable tutorial.



Customized Post Processors

When you install CAMWorks, post processor files that are intended for use with the CAMWorks Tutorials are also installed. These files are installed in the Posts folder inside your CAMWorks data folder.

Example: *Drive:\CAMWorksData\CAMWorks2014\Posts*

These example post processors are meant for sample machines and may sometimes not suit your actual machining requirements. In such a case, you need to procure customized post processors to suit your requirements.

Contact your authorized CAMWorks Reseller for more information on obtaining and/or customizing post processors for your machine tools. Additional mill and turn post processor files (.Ing and .ctl files) can be installed in any folder with write permissions.

Technology Database Settings and Updation

The **TechDB™**, a **Microsoft Access database**, is the intelligence behind the machining automation in CAMWorks.

The Technology Database supplied with CAMWorks contains data that is considered generally applicable to most machining environments. In order to gain full advantage of CAMWorks, you need to customize this data and input additional knowledge that represents your expertise and your facility's capabilities.

- To understand how to adjust the Technology Database settings depending on your requirements, refer [Chapter 8: Technology Database Settings](#) of this document.
- To understand how to customize the data within the Technology Database, refer to the *Technology Database Tutorial*. This PDF document can be accessed from Windows Start menu by selecting *Start>>Programs>>CAMWorks 2014>>Manuals>>Technology Database Tutorial*.
- If you have existing version of CAMWorks and you installed a fresh [CAMWorks Release](#), then you will need to import customized data present in the previous version of CAMWorks to the new version. Note the importing of TechDB data is required if and only if installing a fresh CAMWorks Annual Release and not for upgrading an existing CAMWorks with a [Service Pack](#). To understand the steps for importing TechDB data, refer [Chapter 12: Updating the Technology Database](#) of this document.



The Importance of Backing up CAMWorks Data

You should regularly make backup copies of any files that you cannot replace easily. Having a recent backup on a different computer or other media will allow you to restore data and avert potentially disastrous results that could be caused by adware, spyware, viruses, computer crashes, inadvertently overwriting files that have been customized, hard drive failure, power failures or spikes.

Customized CAMWorks files that must be backed up

Customized *CAMWorks* files that should ideally be backed up include:

- Technology Database.
- Post processors.
- Wire EDM cutting conditions databases.
- Setup sheets.
- API macros.
- Files for machine definitions used for Machine Simulation.
- Files for holders and tools.
- License file for either the dongle or FlexLM software licensing.
- If you customize the Feed/Speed Library, backup the database file, *MATERIAL.MDB*. This file is located in the folder where you installed Feeds and Speeds.
- For the [Predator CNC Editor](#), if you customize the machines and the formats for sending and receiving NC code, backup *PFEEditor.mdb*.

Note: When you update an existing CAMWorks installation with a [Service Pack](#), before the Setup program removes your current TechDB files, copies of the existing [TechDB.mdb](#) and [ReportDatabase.mdb](#) files that are located in the *\Lang\xxxx* folder are [stored in a backup folder](#). However, you should back up these files regularly.

Installing Optional Programs

A number of Optional programs which work in supplementary capacity to CAMWorks are available on the CAMWorks website. Some of these programs require licensing in order to run.

Refer to [Appendix A: Installing Optional Programs](#) for list of all such optional software programs along with their description, licensing info and installation info.



4. THE CAMWORKS LICENSE

The *CAMWorks* application requires a valid license in order to run it. The license for the CAMWorks application can be purchased from your CAMWorks Reseller.

This chapter deals with the following aspects of CAMWorks license:

- [CAMWorks Modules](#)
- [License Duration of the CAMWorks License](#)
- [Types of CAMWorks License](#)
- [Licensing Methods for CAMWorks License](#)
- [CAMWorks License Modes](#)
- [CAMWorks License Manager](#) (utility required for activating the License)
- [Hardware Dongle License Driver](#) (driver for reading Hardware Dongle)

CAMWorks License Modules

The CAMWorks application consists of numerous modules. Separate CAMWorks modules are available for 2½ Axis Milling, 3 Axis Milling, Rotary Milling, 3 Axis with undercut, Wire EDM, Turning, Machine Simulation, etc.

You need to purchase the desired CAMWorks modules based on your machining requirements.

When you purchase CAMWorks modules from a CAMWorks Reseller, you will receive a CAMWorks license file (either [standalone](#) or [floating](#)). The CAMWorks license you receive contains information on all the CAMWorks modules you are licensed to run.

Refer to [List of CAMWorks Modules and their Functionalities](#) in **Appendix B** for a detailed list of all the various CAMWorks modules and the functionalities supported by them. The following topics are covered in that section:

- [Viewing the CAMWorks Modules you are licensed to run](#)
- [List of CAMWorks Modules and their functionalities](#)
- [Selectively activating CAMWorks modules on a floating network](#)
- [Maximum Permissible Concurrent Users on a Floating Network](#)



License Duration of the CAMWorks License

The CAMWorks license can be either perpetual or temporary in nature.

Perpetual License

The CAMWorks license you purchase from your Reseller is usually perpetual in nature. This means that the license will never expire and you can continue using the *CAMWorks* application forever. However, note that you need to purchase a separate [Update Support Plan \(USP\)](#) from your Reseller in order to receive latest updates for *CAMWorks* and to receive technical support.

Temporary or Time-bound License

In specific cases, Geometric Americas, Inc. may issue temporary or time-bound licenses for CAMWorks. Such licenses are non-perpetual in nature and CAMWorks will not function after the expiry date of the license.

If you are running CAMWorks on a temporary or time-bound, when fewer than 30 days remain for the license to expire, CAMWorks will display a message indicating the number of days left on the license. If you want to obtain a permanent license, contact your CAMWorks Reseller.

- ➔ If you use SolidWorks, CAMWorks will run in [Demonstration mode](#) when the license expires.
- ➔ If you use CAMWorks Solids, then you will be unable to launch CAMWorks Solids.

Types of CAMWorks License

Based on single-user or multi-user requirements, the CAMWorks license can be activated either as a standalone license (for single-user installations) or as a Floating License (for multi-user installations).

The Standalone License

A standalone license (node-locked) authorizes the use of *CAMWorks* on a specific computer. The standalone license employs licensing method of either FlexLM Software or Hardware Dongle for activating the license.

- To learn more about activating the standalone license using [FlexLM Software](#) licensing method, read:
[Chapter 5: Activating the Standalone License using FlexLM Software.](#)
- To learn more about activating the standalone license using [Hardware Dongle](#) read:
[Chapter 6: Activating the Standalone License using Hardware Dongle.](#)

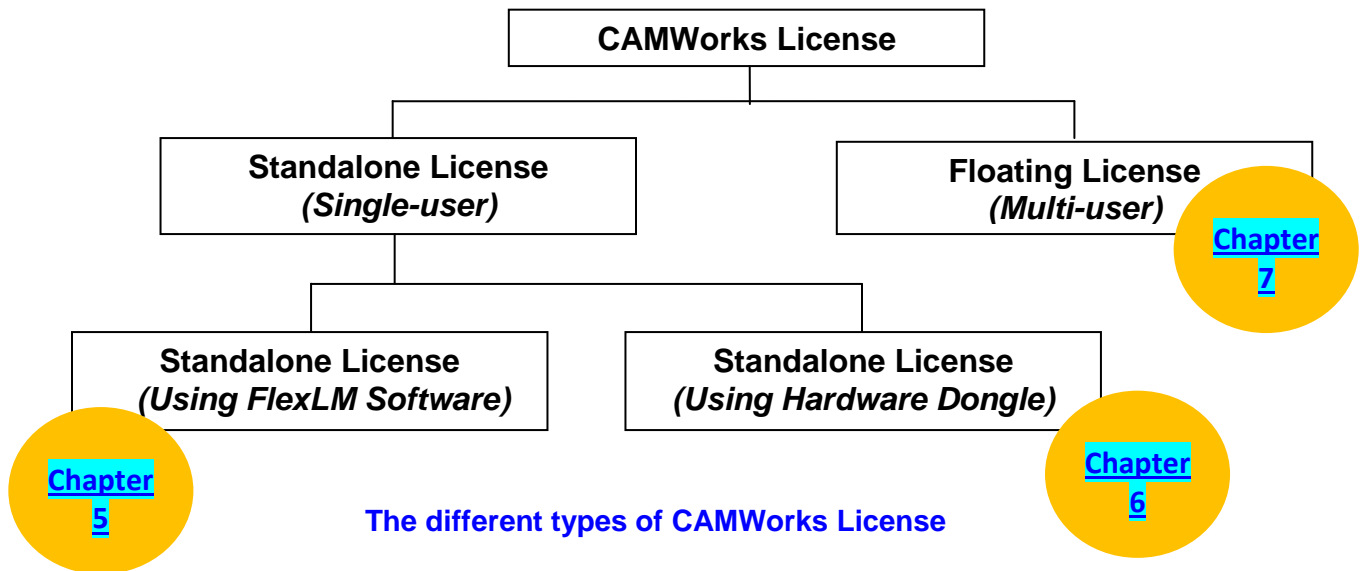


The Floating License

The Floating license is ideal in environments where multiple copies of *CAMWorks* are to be run simultaneously on multiple *CAMWorks* client computers. One computer on such a network is designated as the License Server. Other client computers will run *CAMWorks* by accessing the floating network license on the server. The server computer can also be setup as a client.

- To learn more about activating the floating license, read:

[Chapter 7: Activating the Floating License](#)



Licensing Methods for CAMWorks License

Two Licensing methods are available for *CAMWorks*. Both the methods have been designed to protect you and Geometric Americas, Inc. from unauthorized use of *CAMWorks*.

FlexLM Software License

CAMWorks uses **FlexLM Software License** as the default licensing method. This licensing method uses a Built-In software encryption technology for generating licenses and can be used for both Standalone and Floating licenses.

To use the FlexLM Software License method, the [CAMWorks License Manager](#) utility is required. This utility is automatically installed when you [download the zip file containing CAMWorks executables](#) and proceed to [install CAMWorks by direct access](#).



- To learn how to activate the standalone license using FlexLM Software encryption, read:
[Chapter 5: Activating the Standalone License using FlexLM Software.](#)
- To learn how to activate the floating license using FlexLM Software encryption, read:
[Chapter 7: Activating the Floating License](#)

Hardware Dongle

A dongle (also referred to as a **key** or **security block**) is a small hardware device that fits on the USB connector/port of the computer. This licensing method can be used only for [standalone licensing](#).

To use the Hardware Dongle licensing method, the [Hardware Dongle License Driver](#) and the [CAMWorks License Manager](#) utilities are required.

To learn how to activate the standalone license using Hardware Dongle, read:

[Chapter 6: Activating the Standalone License using Hardware Dongle.](#)

If you face any issues while trying to activate the CAMWorks license, then for troubleshooting, refer [Troubleshooting B: License Activation](#) of this document.

CAMWorks License Modes

When you purchase a CAMWorks license, the mode in which it is intended to run is also embedded into the license. CAMWorks is currently supplied in Commercial, Educational and Instructor license modes. When CAMWorks fails to detect a valid license, CAMWorks will run in Demonstration Mode.

To gain an understanding of the compatibility of files created in different CAMWorks License modes, refer [Appendix C: Compatibility between Different License Modes](#).

Commercial Mode

The *Commercial* mode of the CAMWorks license is intended for commercial purposes. CAMWorks is fully functional in the *Commercial* mode.

Educational Mode

The *Educational* mode of the CAMWorks software license is intended for non-commercial, educational use only. The CAMWorks *Educational* license mode may



not be resold or used for commercial purposes. In the *Educational* mode version, CAMWorks is fully functional except for these restrictions:

- CAMWorks data saved in files using the Educational Mode license cannot be restored in a *Commercial* license version.
- Post processing is disabled.
- The software may not be resold or used for commercial purposes.

Instructor Mode

The *Instructor* mode of the CAMWorks software license is intended for purchase by educational institutes and to be used by Instructors. In the *Instructor* mode version, CAMWorks is fully functional except for these restrictions:

- CAMWorks data saved in files using the *Instructor* mode license cannot be restored in a *Commercial* license version. However, CAMWorks data saved in files using a *Commercial* mode license can be run on *Instructor* mode license.
- The software may not be resold or used for commercial purposes.

Demonstration Mode

After you install *CAMWorks*, it will run in *Demonstration* mode in the following cases:

- Till a valid license is activated after installing *CAMWorks*.
- If the *CAMWorks* license expires
- When a valid CAMWorks license purchased is not detected by either the [FlexLM Software Licensing Method](#) or the [Hardware dongle Licensing Method](#).

Limitations of the Demonstration Mode

In *Demonstration* mode, CAMWorks is fully functional except for these restrictions:

- CAMWorks data saved in files cannot be restored in a *Commercial* licensed version.
- Post processing is disabled and NC code cannot be generated.

Note: CAMWorks Solids does not run in *Demonstration* mode and will not start without a valid CAMWorks license.



CAMWorks License Manager

The *CAMWorks License Manager* utility is the built-in License Management mechanism for CAMWorks.

- If you are using a [FlexLM Software License](#), you need the *CAMWorks License Manager* to request/ activate/ update your software License.
- If you are using a [Hardware Dongle](#), you need the *CAMWorks License Manager* to activate/update your Dongle License.

Installing the CAMWorks License Manager utility

This utility can be installed using anyone of the following methods:

- Downloading the CAMWorks installer zip file and [installing CAMWorks by Direct Access](#).
- Downloading the CAMWorks installer zip file and executing the **CWLicenseManager.exe** present within the *LicenseManager* folder of the [unzipped installer file](#).
- Downloading the installer for *CAMWorks License Manager* utility from the *Downloads Area* (*CAMWorks Downloads* section) of the [CAMWorks website](#).

Opening the CAMWorks License Manager Utility

This utility can be opened using any one of the following methods:

- Select **Start** on the Windows taskbar, then select **Programs>>CAMWorks License Manager>>CW License Manager**.
- After launching CAMWorks as an Add-in the SolidWorks or CAMWorks Solids environment, click on the **Help** menu and select **CAMWorks 2014>>License Manager**.

Hardware Dongle License Driver (Sentinel Driver 7.6.6)

If you are using a [Hardware Dongle device](#) for [CAMWorks licensing](#), a driver is required in order for CAMWorks to read the dongle. This driver facilitates the detection and activation of the Hardware Dongle on your system. Without this driver, CAMWorks cannot read the dongle and will start in [demonstration mode](#) when run as an Add-In within SolidWorks/ CAMWorks Solids. Note that this driver is not required for the built-in [FlexLM Software license](#).

Once installed, the driver works in the background enabling CAMWorks to read the Hardware Dongle license.

This driver is always automatically installed when you install CAMWorks. Alternatively, the **Sentinel Driver 7.6.6** can be downloaded and installed from the *Downloads Area* (*Miscellaneous Downloads* section) of the [CAMWorks website](#).



5. ACTIVATING THE STANDALONE LICENSE USING FLEXLM SOFTWARE

You need to activate the license in order to use the *CAMWorks* application. Your CAMWorks license defines the modules and versions that you are authorized to run.

CAMWorks provides two options for standalone licensing:

1. **Software encryption:** Built-in software encryption technology is the default licensing method for CAMWorks. After you install the CAMWorks License Manager, you must submit the request for a CAMWorks license. You will receive a license file to enable your license.
2. **Hardware dongle (key):** Optionally, a dongle can be used for licensing CAMWorks. This hardware device is connected to the USB connector on the computer.

Each of these methods is designed to protect you and Geometric Americas, Inc. from unauthorized use of CAMWorks.

Given in this chapter are the steps to activate a [standalone \(Node-locked\) license](#) using [FlexLM Software Encryption](#) licensing method.

License File for Standalone License

The CAMWorks application requires a valid license in order to run it. To activate [standalone license](#) or [floating license](#) using [FlexLM Software License](#) that uses Built-In Software Encryption, you require a license file.

After you pay the applicable license fee to the CAMWorks Reseller, you need to generate a License Request File on your system using the [CAMWorks License Manager](#) Utility. When you email this License Request File to Geometric Americas, Inc., you will receive a license file. This license file is a text file with a *.lic* extension that contains encrypted licensing information. It is then activated using the *CAMWorks License Manager* utility.

Steps to Activate the CAMWorks License

Step 1: Pre-Requisites for activating the CAMWorks License

- **CAMWorks License Manager:** The [CAMWorks License Manager](#) utility program is a pre-requisite for activating the CAMWorks license. This utility is automatically installed when you download and [install CAMWorks](#)

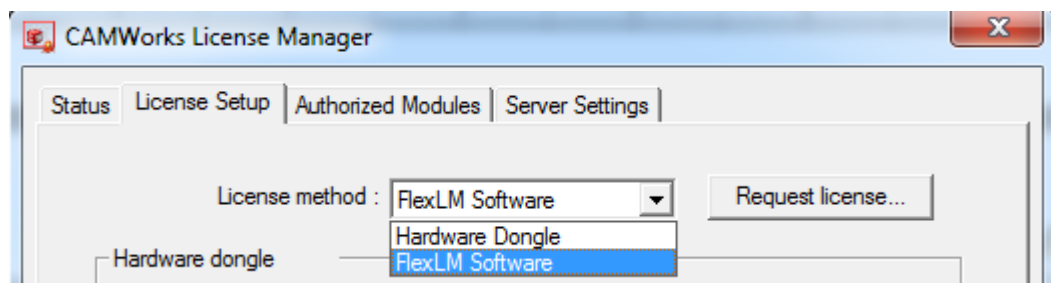


[application by direct access](#). Alternatively, the *CAMWorks License Manager* can be [downloaded from the CAMWorks Website](#).

- **Administrator Privileges:** You must be logged in as Administrator with full privileges when setting up or making changes in the CAMWorks License Manager utility.
- **Direct Access:** The license request file required for generating the license must be created directly on the computer where the license will reside. If the license request file is created when running the *License Manager* via remote communications software such as pcAnywhere (Symantic Corp.) and submitted to Geometric Americas, Inc., an invalid license will be generated. Hence, ensure that direct access is available on the PC on which the license will reside and will be consequently used at least during the stage of generating the License Request file.
- **Activation of License by Remote access:** Once the License file is received by you, the activation of the standalone license can be performed remotely, if required.

Step 2: Requesting the License

1. Open **CAMWorks License Manager** utility. To do so, select **Start** on the Windows taskbar, then select **Programs>>CAMWorks License Manager>>CW License Manager**.
2. The *CAMWorks License Manager* dialog box is displayed. Click the **License Setup** tab.
3. For the License method, make sure **FlexLM Software** is selected.



Select 'FlexLM Software' as the License method

4. Click the **Request License** button.
5. Complete the form. An asterisk (*) indicates a required field.
6. **Email the request:**
 - If you use Outlook for email, click the **Outlook** button and send the email with the attachment to **register@camworks.com**.



- If you use different email software, click the **Other** button. Note the location of the file containing your information, then email the file in an attachment to **register@camworks.com**.
7. Click **Close** to exit the request form. You can also close the CAMWorks *License Manager* dialog box.

CAMWorks can be activated once you receive the license file from Geometric Americas, Inc.

You will receive the license file within one U.S. business day after emailing the **License Request file**.

CAMWorks Request License

User Information

First name*: Bruce

Last name*: Weiner

Company*: Geometrics Ltd.

Address: 15974 N.

Address2: 77th Street #301

Address3: Scottsdale

City:

State / Province*: Arizona

Zip / Postal Code: 85260

Country*: United States of America

Work phone*: 670566668

Fax:

E-mail to receive license codes*: bruce.weiner@geometricsglobal.com

Alternate E-mail:

Server port for floating license: 27000

* Denotes required field

E-mail requests via

Outlook... Other...

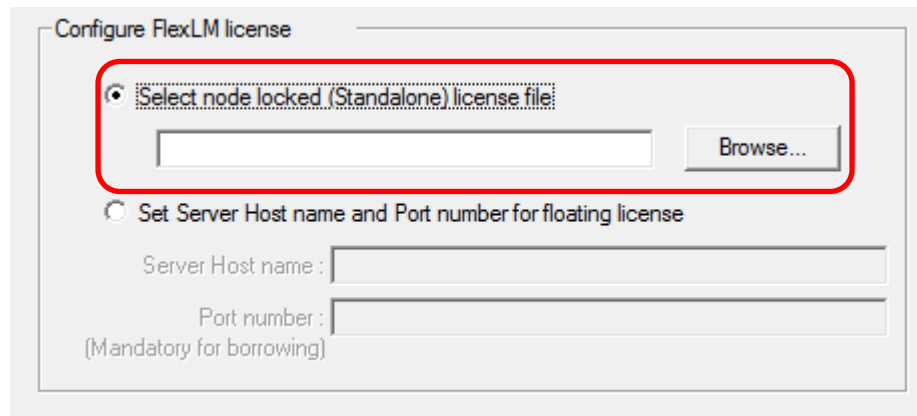
Close

Complete the 'Request License' form and email it to register@camworks.com



Activating/Updating the Standalone License

1. When you receive the [license file](#) from Geometric Americas, Inc., copy the file to a folder on the computer. The License file must be located on the same computer as CAMWorks application. We recommend you put the received license file in the same folder as the *CAMWorks License Manager* in order to avoid confusion.
2. Open the *CAMWorks License Manager* utility by selecting **Start** on the Windows taskbar, then select **Programs>>CAMWorks License Manager>>CW License Manager**.
3. The *CAMWorks License Manager* dialog box is displayed. Click the **License Setup** tab.
4. In the *Configure FlexLM license* group box, make sure **Select node locked (Standalone) license file** is selected, then click the **Browse** button to the right.



Select the option 'Select node locked (Standalone) License File'

5. Browse to the folder where you copied the license file, select the file and click **Open**.
6. Click the **Status** tab and verify that the information has been updated as follows:
 - Authorization status = **Succeeded**
 - License File Used = **path to the file and the <filename>**
 - License Type = **Node-locked**
7. Click the **Authorized Modules** tab.
 - This tab lists the modules you are licensed to run.
 - The **License Duration** at the top right corner of this tab indicates whether your license is perpetual or temporary in nature.
 - If the *License Duration* displays **Permanent**, then it indicates that your CAMWorks license is perpetual in nature.



- If the *License Duration* displays a date, then it indicates that your CAMWorks License is temporary in nature with the date displayed being the date of expiry of the license.
8. Click **Close** to exit the *CAMWorks License Manager* utility.
 9. Open the **SolidWorks** application. Open any part file. Observe that the CAMWorks Command Manager is now available. This indicates that the license activation has been successful.



6. ACTIVATING THE STANDALONE LICENSE USING HARDWARE DONGLE

The **Hardware Dongle** (also referred to as a **key** or **security block**) is an alternative form of [Standalone Licensing](#) for CAMWorks and protects against unauthorized use.

Your CAMWorks Reseller will provide you with a Hardware Dongle if you choose it as your Licensing method. This dongle is a small hardware device that fits on the USB connector/port of the computer.

Given in this chapter are the steps to activate a standalone license using [Hardware Dongle Licensing method](#).

COD File

The *CAMWorks* application requires a valid license in order to run it. To activate [standalone license](#) using Hardware Dongle licensing method, you require a **.cod file**. This .cod file is essentially the license for your Hardware Dongle.

Your CAMWorks Reseller will provide you with Hardware Dongle and a .cod file. The .cod file contains licensing information about the version(s) of CAMWorks that you are licensed to run. If you use additional modules/applications from the CAMWorks stable, then the licensing information these modules too will be included in the .cod file. This .cod file is activated using the [CAMWorks License Manager](#) utility.

Note: The hardware dongle is essentially your license and you may want to insure it against loss. If the dongle is lost or stolen, you will be required to purchase a new license.

Pre-Requisites

1. **CAMWorks License Manager:** The [CAMWorks License Manager](#) utility is a pre-requisite for activating the [.cod file](#) (Hardware Dongle License). This utility is automatically installed when you download and [install CAMWorks application by direct access](#). Alternatively, the *CAMWorks License Manager* utility can be [downloaded from the CAMWorks Website](#).
2. **Hardware Dongle License Driver:** The [Hardware Dongle License Driver \(Sentinel 7.6.6\)](#) utility on your system facilitates the detection and activation of the Hardware Dongle on your system. This utility is automatically installed when you install CAMWorks.

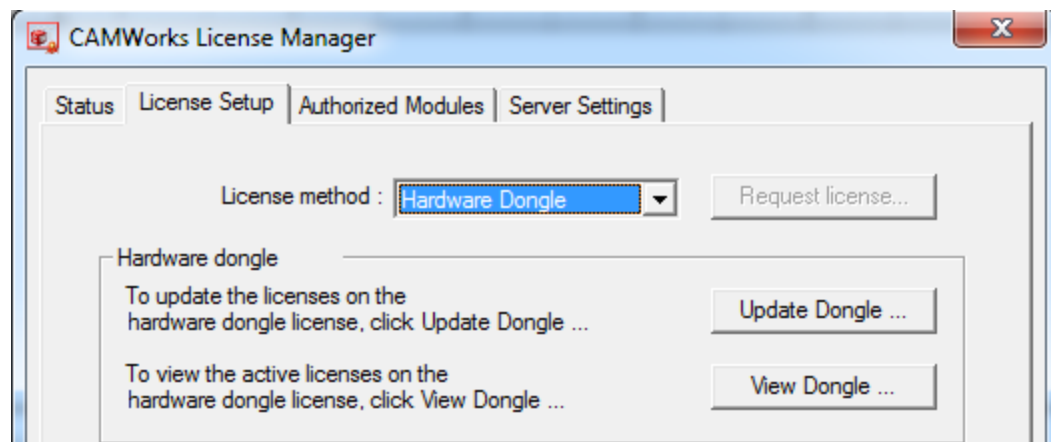


3. **Administrator Privileges:** You must be logged in as Administrator with full privileges when setting up or making changes in the **CAMWorks License Manager** utility.

Activating/Updating the License for Hardware Dongle

Follow the steps below to activate your license in case you use a Hardware Dongle.

1. Attach the Hardware Dongle to the USB port of your computer.
2. Your CAMWorks Reseller will have provided you with a **code file (.cod)** for your hardware dongle. Save this file to your computer on which CAMWorks will be run.
3. Open the *CAMWorks License Manager* dialog box by selecting **Start>>All Programs>>CAMWorks License Manager>>CW License Manager**. Click the **License Setup** tab.
4. For the License method, make sure **Hardware Dongle** is selected. This action activates the **Hardware Dongle** group box.



Select 'Hardware Dongle' as the License Method

5. Click on the **Update Dongle** button.
6. The **Open COD File** dialog box is displayed.
7. Browse to the location where the .cod file is located.
8. Select the **.cod** file and click **Open**.
9. The **Update Protection Block** dialog box is displayed. This dialog box contains all information with respect to the license such as key information, authorized modules, authorized versions etc. Click on the **Update** button in this dialog box to activate/update the license.
10. When the .cod file is successfully updated/activated, the message **"Security Protection Block updated successfully"** will be displayed.



Your Hardware Dongle License is now activated.

Note: If you are updating multiple dongles, make sure you have the correct .cod file for each dongle.

Activating the Hardware Dongle License using the Key Manager utility

The Key Manager Utility

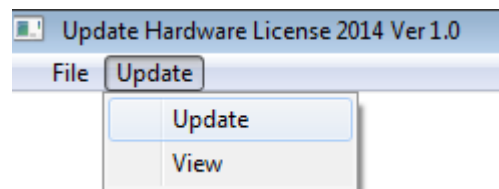
The *Key Manager* utility serves as an alternative method for activating/ viewing/ updating the Hardware Dongle License.

This utility is automatically installed, when you install the **CAMWorks License Manager** utility.

The **Key Manager** utility can be accessed by clicking **Start** on the Windows Task bar and then selecting **Programs>>CAMWorks License Manager>>Key Manager**.

Activating/Updating the Hardware Dongle License using Key Manager

1. Attach the Hardware Dongle to the USB port of your computer.
2. Your CAMWorks Reseller will have provided you with a code file (.cod) for your hardware dongle. Save this file to your computer on which *CAMWorks* will be run.
3. Click **Start** on the Windows Task bar and select **Programs>> CAMWorks License Manager>>Key Manager**.
4. The **Update Hardware License 2014 Ver 1.0** dialog box is displayed.
5. Select **Update** on the menu bar, then select **Update** within this menu.



Update menu bar of the 'Update Hardware License 2014 Version 1.0' dialog box

6. The **Open COD File** dialog box is displayed. The COD file that corresponds to your dongle is listed in the File name field.



7. Browse to the folder location that contains the new COD file, then click **Open**.
8. A dialog box displays the current dongle information and the changes that will be made when the dongle is updated.
9. Click the **Update** button.
10. When the .cod file is successfully updated, the message "**Security Protection Block updated successfully**" will be displayed.
Your Hardware Dongle License is now activated/updated.

Viewing Hardware Dongle related Information using Key Manager

You can view your Hardware Dongle License Information using the *Key Manager* utility.

Following are the steps to view the Hardware Dongle License Information using the Key Manager:

1. Attach the Hardware Dongle to the USB connector/port of your computer.
2. Click **Start** on the Windows task bar and select **Programs>>CAMWorks License Manager>>Key Manager**.
3. The **Update Hardware License 2014 Ver 1.0** dialog box is displayed.
4. Select **Update** on the menu bar, then select **View** within this menu.
5. The Key Information dialog box displays the modules, products and versions that your dongle is programmed to run.

Note: In the **General** section, the **Expiration Date** field indicates the date of expiry of the CAMWorks license in MMDDYY format. If the CAMWorks license is permanent, then the **Expiration Date** field will be blank.



Key Information Dialog box

- When you are finished viewing the information, select **File** on the menu bar, then select **Exit**.

Using the Dongle

Once the Hardware Dongle License is activated, it must remain attached to the computer USB port at all times while CAMWorks is in use. CAMWorks looks for and reads the configuration on the dongle during start-up and periodically while it is running.



7. ACTIVATING THE FLOATING LICENSE

You need to activate the license in order to use the *CAMWorks* application.

Given in this chapter are the steps to activate a [Floating license](#). A floating license can be purchased with configurations supporting one or more users. To activate a Floating License, the [FlexLM Software](#) licensing method that uses Built-in Software encryption technology is used.

The Floating Network License

CAMWorks utilizes software encryption for the floating network license. This license defines which modules and versions you are authorized to run and how many copies of each module can be running simultaneously on CAMWorks client computers. A floating license can be purchased with configurations supporting one or more users. This Floating network license consists of two installation types: Server and Clients.

- **Server** - One computer on the network must be designated as the license server. This computer is used to submit the license request, install and run the CAMWorks License Server and activate the floating network license. The Server computer should also be set up as a Client. This allows you to verify the license and optionally to run CAMWorks.
- **Clients** - The client computers are set up to run CAMWorks by accessing the floating network license on the Server. Unlimited computers can be set up as clients on a network. However, the maximum permissible number of concurrent users is equal to the number of floating licenses that you purchase.

Supported Platforms

Microsoft Windows 32-bit (x86)

Server Implementations

- Windows Server 2012
- Windows Server 2008 including R2
- Windows 7 Professional, Enterprise, Ultimate
- Windows Vista including SP1 - Business, Enterprise, Ultimate
- Windows Server 2003 including SP1 and R2

Clients

- Windows Vista Business, Enterprise, Ultimate
- Windows 7 Professional, Enterprise, Ultimate



Microsoft Windows 64-bit (x64)

Server Implementations

- Windows Server 2008 including R2
- Windows 7 Ultimate
- Windows Vista including SP1 - Ultimate

Clients

- Windows 8
- Windows 7 Ultimate
- Vista including SP1 - Ultimate

License File for Floating License

The *CAMWorks* application requires a valid license in order to run it. To activate [standalone license](#) or [floating license](#) using [FlexLM Software](#) that uses software encryption technology, you require a license file.

You need to generate a License Request File on your Server computer using the ***CAMWorks License Manager*** utility. When you email this License Request File to Geometric Americas, Inc., you will receive a license file. This license file is a text file with a *'.lic'* extension and contains encrypted licensing information. It also contains information about the number of floating licenses embedded within the license. This license file is then activated using the ***CAMWorks License Manager*** utility.

Step 1: Pre-Requisites

1. **CAMWorks License Manager:** The [CAMWorks License Manager](#) utility is a pre-requisite for activating the *CAMWorks* license. This utility is automatically installed when you download and [install CAMWorks application by direct access](#). Alternatively, the *CAMWorks License Manager* utility can be [downloaded from the CAMWorks Website](#).
2. **Administrator Privileges:** You must be logged in as Administrator with full privileges when setting up or making changes in the ***CAMWorks License Manager***.
3. **Physical Machines:** Floating licenses must be created from and reside on physical machines only and not on virtual machines.
4. **Direct Access:** The license request file required for generating the license must be created directly on the computer where the license will reside. If the license request file is created when running the License Manager via remote communications software such as pcAnywhere (Symantic Corp.) and



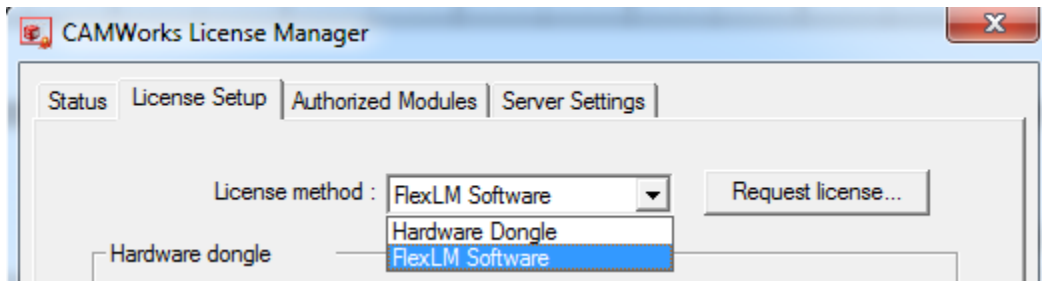
submitted to Geometric Americas, Inc., an invalid license will be generated. Hence, ensure that direct access is available on the PC on which the license will reside and will be consequently used at least during the stage of generating the License Request File.

5. **Remote Installation:** Once the License file is received by you, the activation of the license can also be performed remotely if direct access is not possible.
6. **Microsoft Networks:** The floating network license supports Microsoft Windows networks only.
7. **Read Permissions:** The folder that you select for installing the *CAMWorks License Manager* utility on a client computer must be on a local drive of the current computer and have read permissions in order to access the floating license.
8. **Activate license on Server First:** The *CAMWorks License Manager* must be installed on the Network Server computer and the license must be activated before activating the license software on client computers.
9. **Location of License File:** Do not save the CAMWorks License file that you will receive from your CAMWorks Reseller in the *CAMWorks Program* folder.
10. **MAC Addresses:** MAC addresses are identifiers assigned to most network adapters or network interface cards by the manufacturer for identification. To ensure that the CAMWorks license on the server remains active, it is recommended that:
 - The server computer should contain only one MAC address and it must remain static.
 - The server computer should not be moved or reconnected to the network using a different method, e.g. wireless to hardwired, after the license has been issued and is running.

Step 2: Requesting the License

After installing CAMWorks, you can apply for a permanent Floating Network license.

1. On the computer system designated as the server, open the CAMWorks *License Manager* utility by selecting **Start>>All Programs>>CAMWorks License Manager>>CW License Manager**.
2. The *CAMWorks License Manager* dialog box is displayed. Click the **License Setup** tab.
3. For the License method, make sure **FlexLM Software** is selected.
4. Click the **Request License** button.



Select 'FlexLM Software' as the License method

5. The *CAMWorks Request License* form will be displayed.
6. Complete the form. An asterisk (*) indicates a required field.

Complete the 'Request License' form and email it to register@camworks.com



7. Email the request:

- If you use Outlook for email, click the **Outlook** button and send the email with the attachment to **register@camworks.com**.
- If you use different email software, click the **Other** button. Note the location of the file containing your information, then email the file in an attachment to **register@camworks.com**.

8. Click **Close** to exit the request form. You can also close the CAMWorks *License Manager* dialog box.

The CAMWorks application can be activated once you receive the license file from Geometric Americas, Inc.

9. You will ideally receive the license file within one U.S. business day after emailing the **License Request file**.

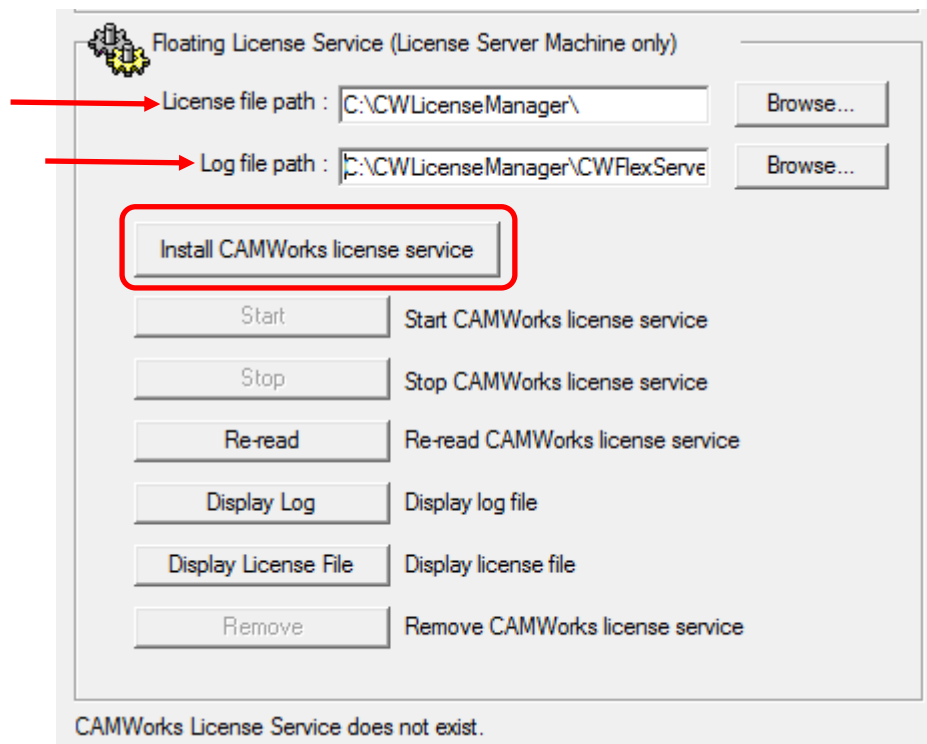
Step 3: Activating the License & Installing CAMWorks License Service

When you receive the license file from Geometric Americas, Inc., copy the license file to a folder on the Server computer.

1. Open the *CAMWorks License Manager* on the Server computer.
2. The *CAMWorks License Manager* dialog box is displayed. Click the **Server Settings** tab.
3. In the **Floating License Service (License Serve Machine only)** group box, set the **License file path**. Click the **Browse** button to the right.
4. Browse to the folder where you copied the license file, select the file and click **Open**.
5. Set the **Log file path**.

The log file must be on the Server that is running the CAMWorks License Service. The log file folder does not have to be the same as the License file folder. The log file folder and the log file *must* have read/write permissions.

6. Observe the status message at the bottom of the tab. It reads **“CAMWorks License Service does not exist.”**



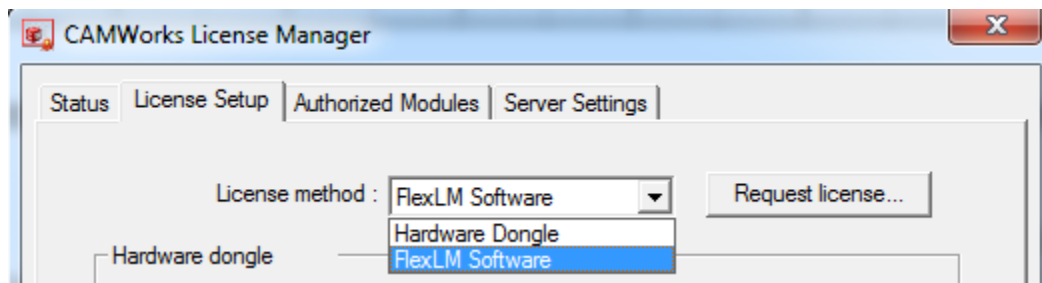
Activating the License and Installing the CAMWorks License Service

7. Click the **Install CAMWorks License Service** button. This installs the CAMWorks License Service.
8. Click the **Start** button.
9. Now observe the status message at the bottom of the dialog box again. The message now indicates that the "**CAMWorks License Service is running**".

Step 4: Verifying the Successful Activation of the Floating License

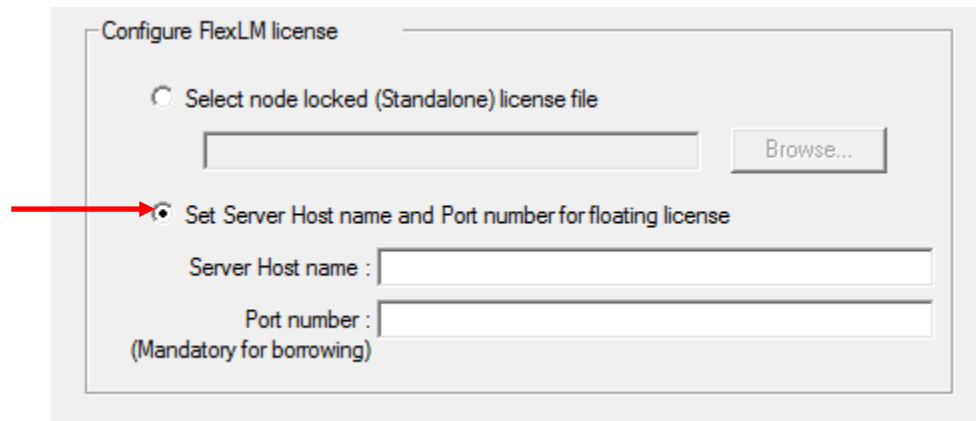
Before setting up the license on the client computers, you should make sure the floating license has been installed and activated successfully on the Server. You can do this by setting up the Server computer as a Client.

1. On the Server computer, open the **CAMWorks License Manager**, if it is not already running.
2. Click on the **License Setup** tab. For the License method, make sure **FlexLM Software** is selected.



Select 'FlexLM Software' as the License method

3. In the **Configure FlexLM license** group box, make sure the **Set Server Host name and Port number for floating license** option is selected.



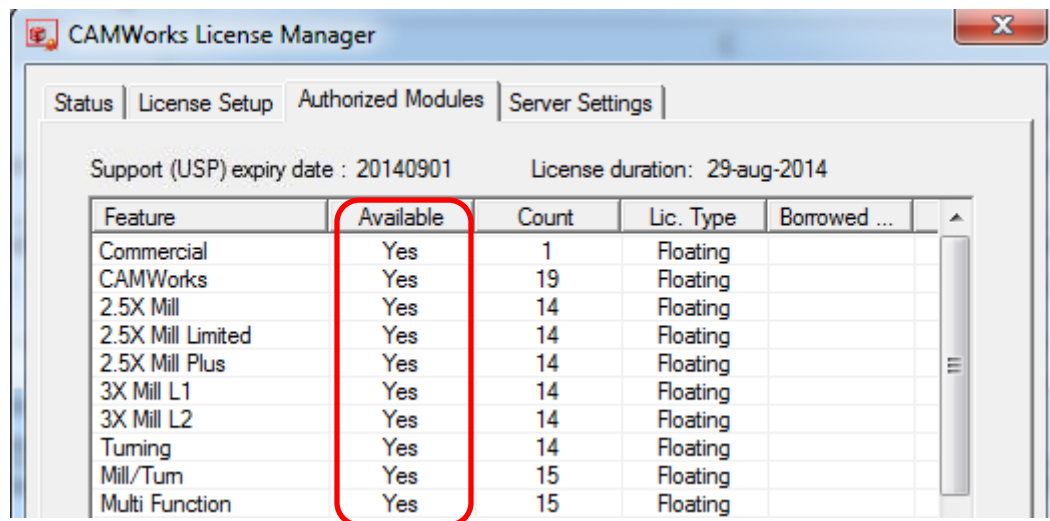
Select 'Set Server Host name and Port number for floating license' in the License Setup tab

4. After selecting this option, type the name of the Server computer in the **Server Host name** field.

Note: The 'Server Host name' field requires the Host name of the Server. Since you are setting up the server computer as a client, the host name of the client is the same as the Server Host name, so you can type the Host name that displays at the top of the dialog box. You will need the Host name of the Server when you set up other client computers.

Authorized Modules tab of CAMWorks License Manager

After completing the above steps, click the **Authorized Modules** tab of the *CAMWorks License Manager* Dialog box. All the [CAMWorks modules](#) (including information on their availability, type, borrow status, etc.) is available in this tab.



Feature	Available	Count	Lic. Type	Borrowed ...
Commercial	Yes	1	Floating	
CAMWorks	Yes	19	Floating	
2.5X Mill	Yes	14	Floating	
2.5X Mill Limited	Yes	14	Floating	
2.5X Mill Plus	Yes	14	Floating	
3X Mill L1	Yes	14	Floating	
3X Mill L2	Yes	14	Floating	
Turning	Yes	14	Floating	
Mill/Turn	Yes	15	Floating	
Multi Function	Yes	15	Floating	

'Yes' in the Available Column indicates successful activation of the particular license

- The **Support (USP) expiry date** at the top left of this tab indicates the expiry date of your [Update Support Plan \(USP\)](#) in **YYYYMMDD** format.
- The licensed modules are listed in the **Feature** column.
 - In the first row, the *Feature* field indicates the [mode of your CAMWorks license](#) (Commercial/ Educational/ etc.)
 - In the second row, the *Count* field indicates the number of floating licenses that are currently available.
 - All the remaining rows from second row onwards indicate the CAMWorks modules for which the CAMWorks license is applicable.
- The **Available** column indicates whether the licensed module listed in the *Feature* column is available or not.
 - If **Yes** displays in the **Available** column against the CAMWorks module, it indicates the successful activation of that particular module.
 - If the *Authorized Modules* tab is blank, the Server may have a software and/or hardware firewall that you need [to configure to allow the clients to see the Server](#).
- The **Count** column indicates the number of licenses available for each CAMWorks module listed in the *Feature* column.
- The **Lic. Type** column indicates whether the license is [Floating](#) or [Node-locked \(Standalone\)](#).

Click **OK** to close the *CAMWorks License Manager* utility. You are now ready to set up the client computers to run CAMWorks.



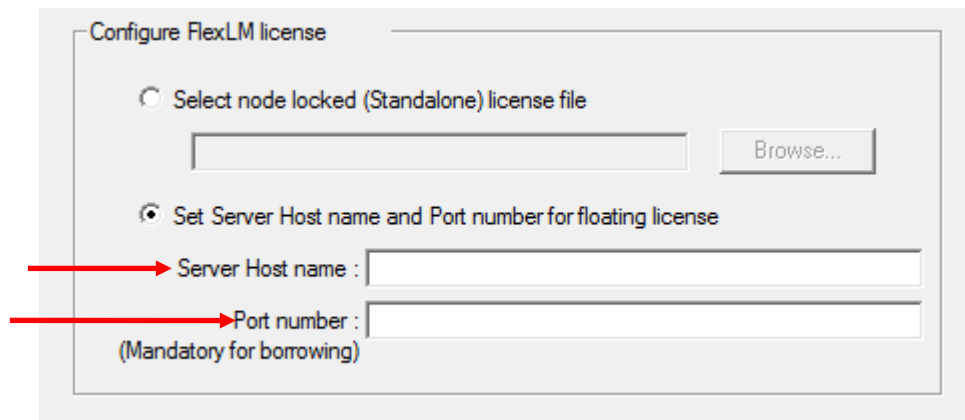
Configuring the Firewall on Server to allow client computer access

If a firewall is running on the server computer, the firewall may need to be configured to allow the clients to access the **CAMWorks License Service**.

Step 5: Installing Floating License on Client computers

After the *CAMWorks License Service* is installed and successfully running on the server, you can activate the license for the CAMWorks application on the client computers. The [CAMWorks License Manager](#) utility is automatically installed on the client computers when the CAMWorks application is installed. On client computers, the activation of the license can be performed remotely.

1. Open the *CAMWorks License Manager* on the client computer by selecting **Start>>All Programs>>CAMWorks License Manager>>CW License Manager**.
2. The *CAMWorks License Manager* Dialog box is displayed. Click the **License Setup** tab.
3. For the License method, make sure **FlexLM Software** is selected.
4. Make sure **Set Server Host name and Port number for floating license** option is selected.
5. After selecting this option, type the name of the Server computer in the **Server Host name** field.



Select 'Set Server Host name' and 'Port number' for floating license in the License Setup tab

Note: The Server Host name must be the Host name of the Server computer, and not the Host name of the client computer that is shown in the **FlexLM software License** group box of the License Setup tab.

6. You can optionally enter the port number of the Server Computer in the **Port number** field.



Note: The Floating Network license allows a client computer to borrow a license for use when not connected to a network. This feature of borrowing a specific license on a client computer mandatorily requires the Port number of the Server computer to be entered in the License Setup tab of the CAMWorks License Manager on the client computer.

7. Click the **Apply** button.
8. Click the **Authorized Modules** tab.
 - The licensed modules are listed in the **Feature** column. The license for the CAMWorks application is listed in the **Feature** column.
 - The **'Yes'** in the **Available** column indicates that the corresponding licensed module listed in the Feature column is active and available.
 - The **Count** column indicates the number of licenses available for each licensed module (Feature).
 - The **Lic. Type** column indicates that the license is **Floating**.
 - The **Support (USP) expiry date** field at the top left corner displays the expiry date of your *Update Support Plan* in **YYYYMMDD** format.
 - The **License duration** field at the top right corner indicates whether your CAMWorks license is perpetual or temporary in nature.
 - If you have a CAMWorks license of perpetual nature, then the License duration will be displayed as **'Permanent'**.
 - If you have a temporary CAMWorks license, then the **expiry date of your license** will be displayed in the License duration field.
9. Click **OK** to close the *CAMWorks License Manager* Dialog box. No additional information and actions are required for enabling a client computer.

Activating CAMWorks Modules on Client Computers

The CAMWorks license you receive contains information on all the [CAMWorks modules](#) you are licensed to run. On a floating network, the CAMWorks license file also contains information on the number of licenses allotted for each CAMWorks module.

On a floating network with multiple users, situations may arise where it becomes imperative to activate only those modules that the client requires and release unused modules to other clients that may require them.

To understand how to selectively activate CAMWorks modules on a client computer, read the section: [Selectively Activating CAMWorks Modules](#) within [Appendix B](#).



Borrowing a Floating license on a Client computer

The feature of borrowing a floating license allows client computers to borrow the license(s) for one or more CAMWorks modules when not connected to a floating network.

This functionality is especially useful for client computer users when travelling or working at a location away from their office.

Note: Licenses can be borrowed only by client computers.

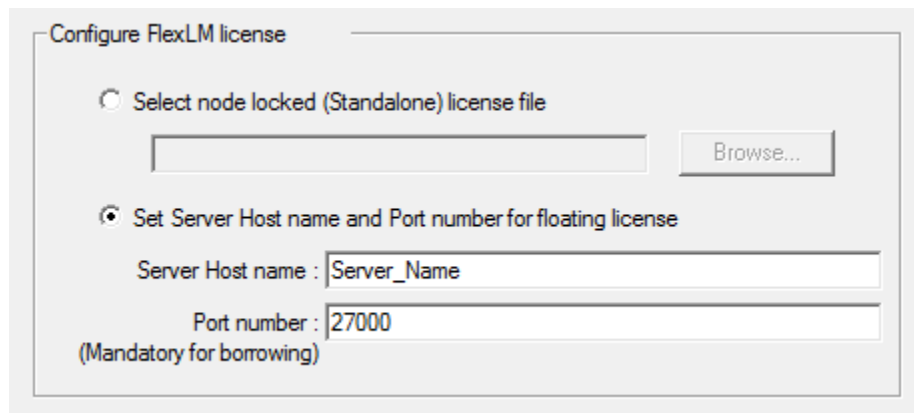
Duration for which a floating license can be borrowed

- A CAMWorks license on a floating network can be borrowed for a maximum period of 7 days.
- License cannot be borrowed if CAMWorks is running in [Demonstration mode](#).

Steps to borrow a floating license on a client computer

Following are the steps to borrow a license on a client computer:

1. Open the *CAMWorks License Manager* utility on the client computer by selecting **Start>>Programs>>CAMWorks License Manager>>CW License Manager**.
2. The *CAMWorks License Manager* Dialog box is displayed. Click on the **License Setup** tab.
3. In the **Configure FlexLM license** group box, ensure that the **Port number** of the Server computer is entered. If it is not, then enter the port number. (The feature of borrowing a floating license is enabled only when the Port number of the server is entered in the corresponding field in the tab.)

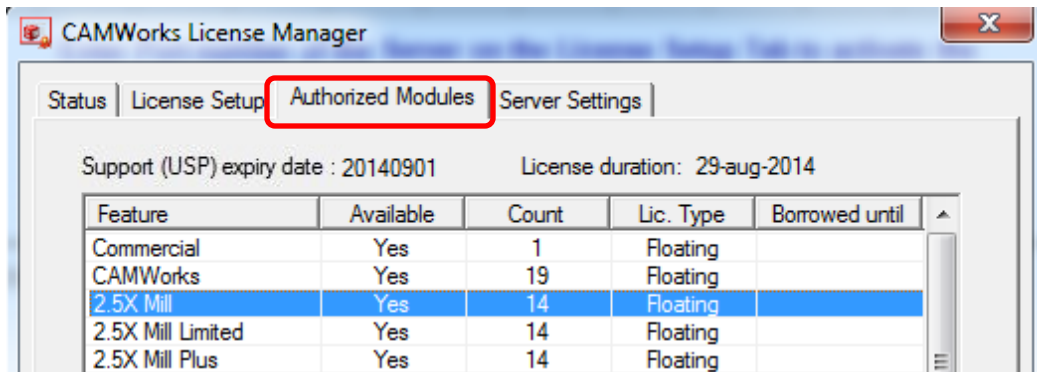


Enter Port number of the Server on the License Setup Tab to activate the functionality of License Borrowing



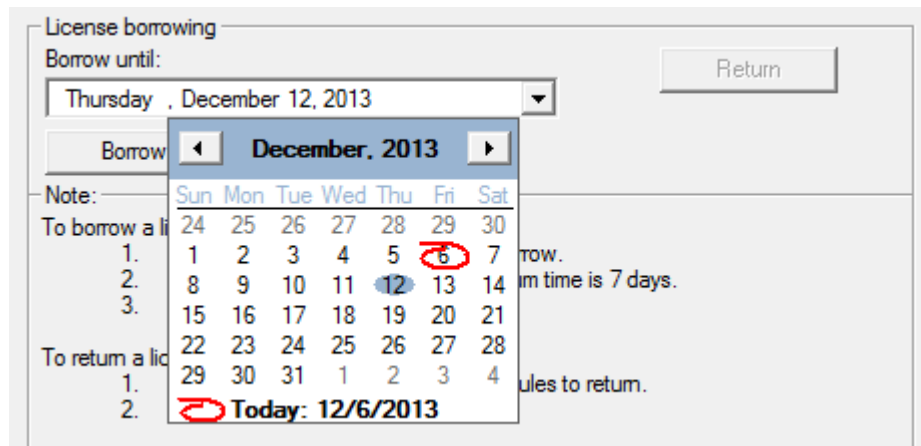
Note: In order to borrow a floating license, the Port number mentioned in the Server License File should be entered in the Port number field in the License Setup tab of CAMWorks License Manager dialog box on the client computer. If the Port number is not specified, then the License Borrowing functionality will be disabled.

- Click on the **Authorized Modules** tab of the CAMWorks License Manager dialog box.



Select one or more from list to borrow the CAMWorks license

- From the list of the displayed CAMWorks modules, select one or more CAMWorks licenses to borrow. To select a module, highlight the desired module by clicking on it. To select multiple modules listed in the grid, use the **Control** key and then highlight the desired modules using the mouse.
- In the **License borrowing** group box (below the CAMWorks modules), select a date from the **Borrow until:** list.
- Click on the **Borrow** button. Note that a license can be borrowed only for a maximum of 7 days.
 - If you select a date exceeding more than 7 days from the current date, then the license from the selected CAMWorks modules will not be borrowed. The **Remarks** field in the Authorized Modules grid will display the message **“You cannot borrow that long. So, please**



Select the date up to which the license is to be borrowed

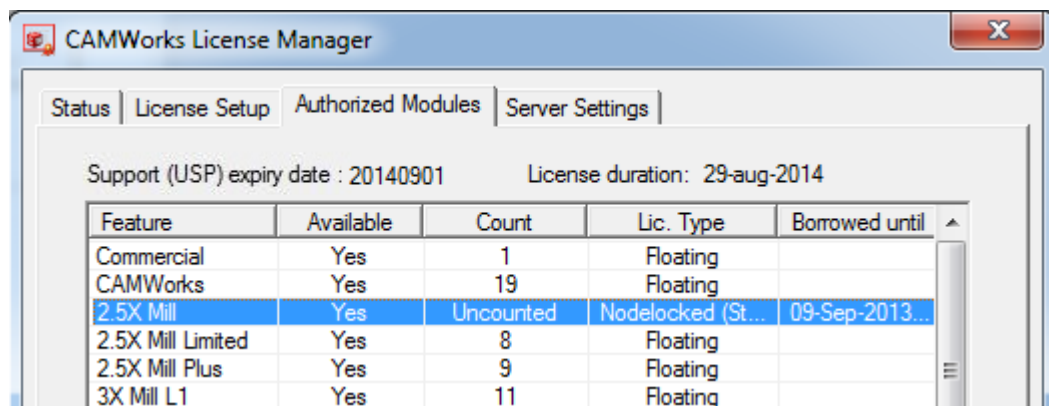


select an earlier date and try again.”

- If you select a date within the 7-day period from the current date, then the license for the selected CAMWorks module(s) will be borrowed on the particular client machine.

When the borrowed CAMWorks module is highlighted in the grid, the following will be observed:

- The **Count** field will now display **'Uncounted'** instead of the number of available floating licenses.
- The **Lic. Type** field will now display **'Nodelocked (Standalone)'** instead of **'Floating'**.
- The **Borrowed until field** will display the date and time until which the license will remain borrowed. The appearance of date and time in this field indicates that the license for the selected module has been successfully borrowed.
- The **License borrowing** group box will be disabled.



Authorized Module tab indicating that license is borrowed

8. The borrowed license(s) will effectively become node-locked on the client computer borrowing. The license(s) will remain thus either until the license(s) are returned or until the **Borrow until** date occurs. The borrowed license(s) will be returned automatically to the floating network on the due date and time of borrowed license (even if client is not connected to the floating network). How to return a license is explained in the next section.

If you face any issues while trying to borrow the license for CAMWorks modules on a floating network, then for troubleshooting, refer [Troubleshooting C: Borrowing Licenses on a Floating Network](#) of this document.



Returning the Borrowed License

A license borrowed on a floating network can be returned at any point of time before the due date. To return the borrowed license, client must be connected on the floating network and able to access the server. Following are the steps to return a license:

1. Open the **CAMWorks License Manager** utility on the client computer.
2. Click on the **Authorized Modules** tab of the CAMWorks License Manager dialog box.
3. In the grid, highlight the module whose borrowed license is to be returned.
4. Click on the **Return** button.



8. TECHNOLOGY DATABASE SETTINGS

The Technology Database (TechDB)

The **TechDB™**, a **Microsoft Access database**, is the intelligence behind the machining automation in CAMWorks. The knowledge-based machining technology, tooling, cutting conditions and operation defaults saved in the Technology Database are used to generate operations automatically.

The TechDB is shipped with data that is considered generally applicable to most machining environments. In order to gain full advantage of CAMWorks, you need to customize this data and input additional knowledge that represents your expertise and your facility's capabilities. The machining information in the database is divided into these categories:

- **Machine:** Machines for all the CNC machines in your facility and the associated controller and tool crib.
- **Tools:** The tool library can contain all the tools in your facility.
- **Cutting Parameters:** Information for calculating feed rates and spindle speeds, stock materials and tool materials.
- **Feature and Operations:** The machining sequence and operation for each combination of feature type, end condition, and size.

This chapter deals with the various Technology Database settings you might have to change from time to time depending on your requirements.

The following topics are covered in this chapter:

- [Supported Microsoft Access Versions for running TechDB](#)
- [Default Location of the TechDB files](#)
- [Function of the TechDB files](#)
- [Default TechDB mode on installing CAMWorks](#)
- [Opening TechDB in 32-bit or 64-bit mode](#)
 - [Opening TechDB from the CAMWorks Interface](#)
 - [Opening TechDB using Windows Explorer](#)
 - [Opening TechDB from Windows Start menu](#)
- [Sharing the TechDB on a Network Drive](#)
- [Using a SQL-based TechDB](#)



Supported Microsoft Access Versions for running TechDB

Both 32-bit and 64-bit versions of the following Microsoft Access versions are supported:

- Microsoft Access 2003 (32-bit)
- Microsoft Access 2007 (32-bit)
- Microsoft Access 2007 Runtime (32-bit)
- Microsoft Access 2010 (Both 32-bit and 64-bit)
- Microsoft Access 2013 (Both 32-bit and 64-bit)

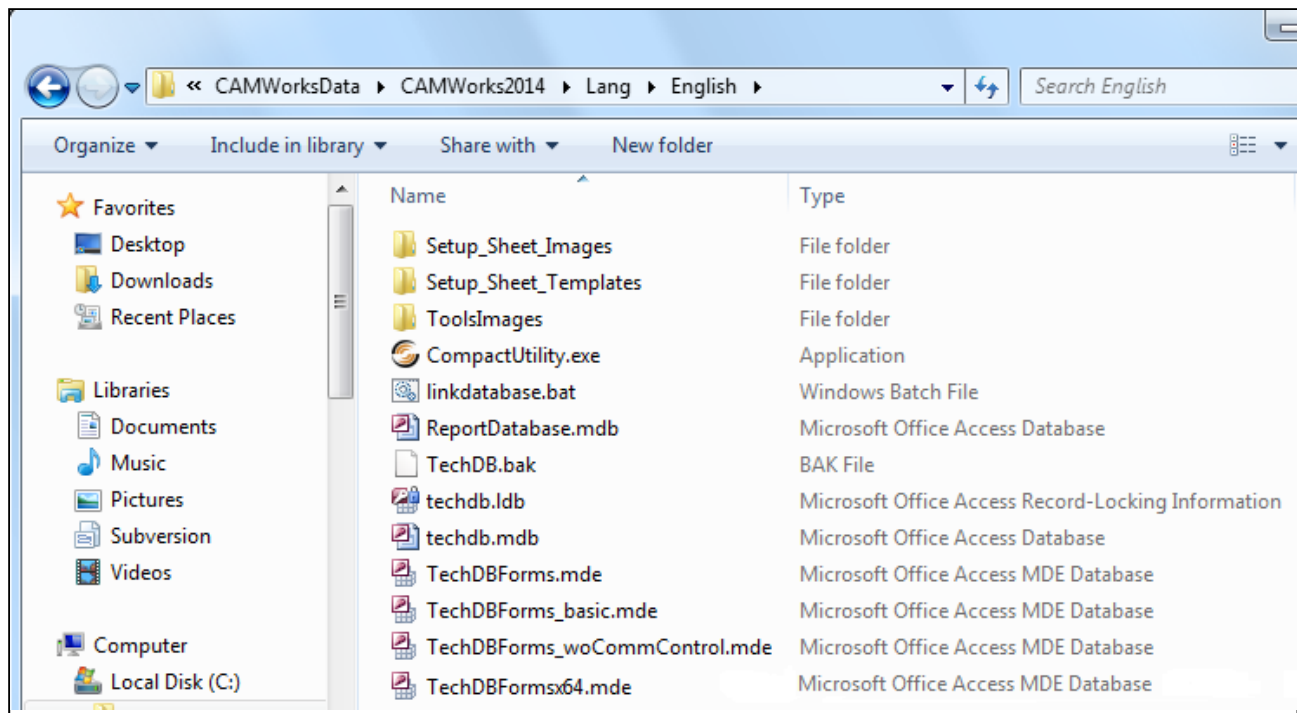
Default Location of the TechDB files

When *CAMWorks* is installed, TechDB files are installed within the *CAMWorks* installation folder usually at the following locations:

Drive:\CAMWorksData\CAMWorks2014\Lang\xxxx *(for 32-bit systems)*

Drive:\CAMWorksData\CAMWorks2014x64\Lang\xxxx *(for 64-bit systems)*

Where, **xxxx** indicates the language folder



TechDB files located in the \CAMWorks2014x64\Lang\xxxx folder



Function of the TechDB files

- **TechDB.mdb:** This file contains the data portion of the TechDB. By default, it is located in the *Vang\xxxx* folder within the *CAMWorks2014* installation folder. If required, this file can be moved to any other folder location, including a network drive. Moving this file to a network drive will be required in cases where more than one CAM engineer would be using a centralized knowledge base. TechDB accessed from such a shared location will ensure that all users access a common TechDB.

For more details, read: [Sharing the TechDB on a Network Drive](#)

- **ReportDatabase.mdb:** This file contains the forms and data for the Setup Sheet function. When you customize the Setup Sheet data or Report templates, then the customized data is stored into the *ReportDatabase.mdb* file. By default, this file is installed in the same location as *TechDB.mdb* when you install *CAMWorks*. This file must be located in the same folder as the *TechDB.mdb*. If the *TechDB.mdb* file moved to a shared location, then the *ReportDatabase.mdb* file must also be moved to the same location.

- **TechDBForms.mde/ TechDBFormsx64.mde:**

These files provide the User Interface for all the forms of TechDB. When you run TechDB and access the various forms, this file retrieves TechDB data from the *TechDB.mdb* file.

- The *TechDBForms.mde* is used to [open the TechDB](#) in 32-bit Microsoft Access version.
- The *TechDBForms_basic.mde* is used to [open the TechDB](#) in 32-bit Microsoft Access version. (It provides a basic User Interface with not navigation tree and is recommended for use only if you face problems in using *TechDBForms.mde*.)
- On 64-bit systems, the *TechDBFormsx64.mde* is used to [open the TechDB](#) in 64-bit Microsoft Access version.

When the [TechDB is shared on a Network Drive](#), the *TechDB.mdb* and *ReportDatabase.mdb* files are moved from the default location to the shared location. However, the *TechDBForms.mde*, *TechDBForms_basic.mde* and *TechDBFormsx64.mde* files must still remain the *Vang\xxx* folder of the *CAMWorks2014* installation folder (where *xxx* defines the language).

- **TechDBForms_basic.mde:** *TechDBForms.mde* depends on availability of a certain Microsoft components like *CComCtl32.dll*. Microsoft updates may cause these Microsoft components to get deleted or unregistered, thus leading to issues while using TechDB in 32-bit mode. If the user encounters such an issue while accessing TechDB in 32-bit mode, then it is recommended that the user switches to using the *TechDBForms_basic.mde* file for accessing TechDB. This file does not use any such Microsoft



components and consequently eliminates any issues faced in accessing TechDB in 32-bit mode.

- **TechDB.bak:** This file facilitates [creation of backup files of the TechDB.mdb and ReportDatabase.mdb](#) whenever the *CAMWorks* installation is updated with a [Service Pack](#).

In case you plan to use a SQL-based TechDB, this file is required for creating the SQL-based database.

For more details, read: [Using an SQL-based TechDB](#)

Note: To learn how to customize the Technology Database to suit your facility's requirements, we recommend that you read the Manual 'Technology Database Tutorial'. This manual can be accessed from the Start menu of Windows by selecting *All Programs>>CAMWorks2014>>Manuals>>Technology Database Tutorial*.

Default TechDB mode on installing CAMWorks

The TechDB files are automatically placed into a [default location](#) when you install *CAMWorks*.

When *CAMWorks* is installed, it will detect for the presence of Microsoft Access on the system. TechDB will run in 32-bit mode or 64-bit mode depending on machine configuration (32-bit or 64-bit) and the Microsoft Access version installed.

- On a 32-bit or 64-bit system, if Microsoft Access is not detected, *CAMWorks* will install a **32-bit Runtime version of Microsoft Access 2007** on the machine. The TechDB will be run only in 32-bit mode.
- On 32-bit systems, TechDB will be run only in 32-bit mode.
- On 64-bit systems, if only 64-bit version of Microsoft Access is detected (and not 32-bit), then TechDB will be run in 64-bit mode by default.
- On 64-bit systems, if both 32-bit and 64-bit versions of Microsoft Access are present, TechDB will be run in 32-bit mode by default.

Opening TechDB in 32-bit or 64-bit mode


Though TechDB runs in 32-bit mode by default on 64-bit systems, users can switch the TechDB to 64-bit mode, if required. However, running the 64-bit mode of TechDB is only possible if 64-bit Microsoft access is installed on the system.

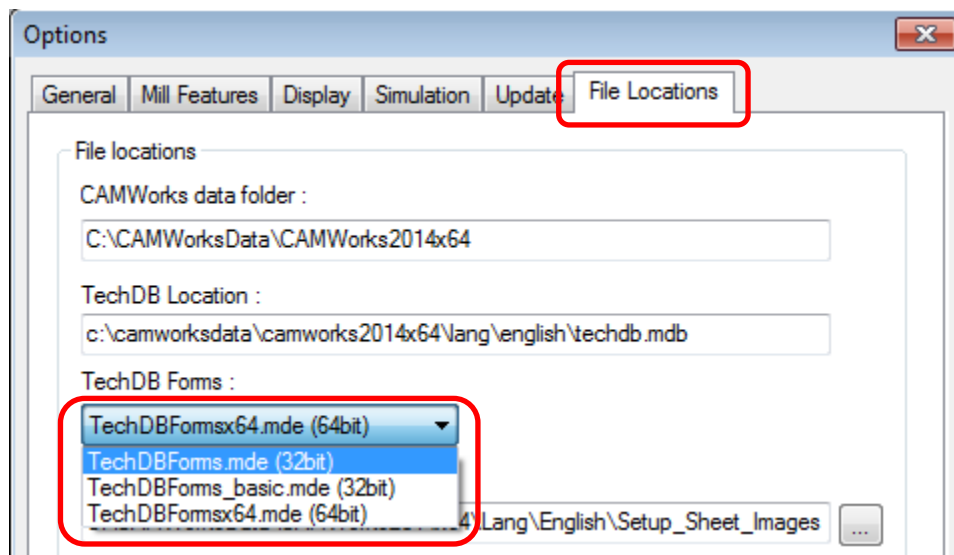
The following methods explain how to open TechDB in 32-bit or 64-bit mode.



Method 1: Opening TechDB from the CAMWorks Interface


Step 1: Changing the Settings of TechDB in CAMWorks Options

1. Open *CAMWorks* as an Add-In within SolidWorks/CAMWorks Solids.
2. On the CAMWorks Command Manager, click on the *CAMWorks Options* button .
3. The *Options* dialog box is displayed. Click on the *File Locations* tab.
4. In the TechDB forms dropdown list:
 - Select [TechDBForms.mde \(32bit\)](#) to run TechDB in 32-bit mode.
 - Select [TechDBForms basic.mde \(32bit\)](#) to run TechDB in 32-bit mode with a basic UI.
 - Select [TechDBFormsx64.mde \(64bit\)](#) to run TechDB in 64-bit mode.
5. Click *OK* to apply the changes and close the dialog box.
6. Restart SolidWorks/CAMWorks Solids.



Selecting the TechDB Forms format from the dropdown list in the Options dialog

Step 2: Clicking on the TechDB button on the CAMWorks Command Manager

Launch *CAMWorks* as an Add-In within SolidWorks/CAMWorks Solids. On the CAMWorks Command Manager, click on the  **Technology Database** button. The TechDB will be launched in 32-bit or 64-bit depending on the TechDB settings in CAMWorks Options.

Note: The TechDB Forms setting within CAMWorks Options will be applied whenever you access TechDB from the CAMWorks Interface.



Method 2: Opening TechDB using Windows Explorer

Using Windows Explorer, open the [default folder location of TechDB files](#). In this folder location, open the file [TechDBForms.mde](#) or [TechDBFormsx64.mde](#) or [TechDBForms basic.mde](#).

Method 3: Opening TechDB from the Windows Start menu

Opening English Language TechDB from Windows Start menu

Click **Start** on the Windows task bar and select **All Programs>>CAMWorks2014>>Technology Database**.

- To open TechDB in 32-bit mode, select **Technology Database** listed under this menu item. (This action opens the file [TechDBForms.mde](#).) On 64-bit machines, this option will be displayed only if a 32-bit version of Microsoft Access is installed.
- To open TechDB in 32-bit mode with a basic UI instead of Advanced UI, select **Technology Database Basic** listed under this menu item. (This action opens the file [TechDBForms basic.mde](#).) On 64-bit machines, this option will be displayed only if a 32-bit version of Microsoft Access is installed.
- To open TechDB in 64-bit mode, select **Technology Database (64-bit)** listed under this menu item. (This action opens the file [TechDBFormsx64.mde](#).) Note that this option will be displayed only if your system has a 64-bit version of Microsoft Access installed.

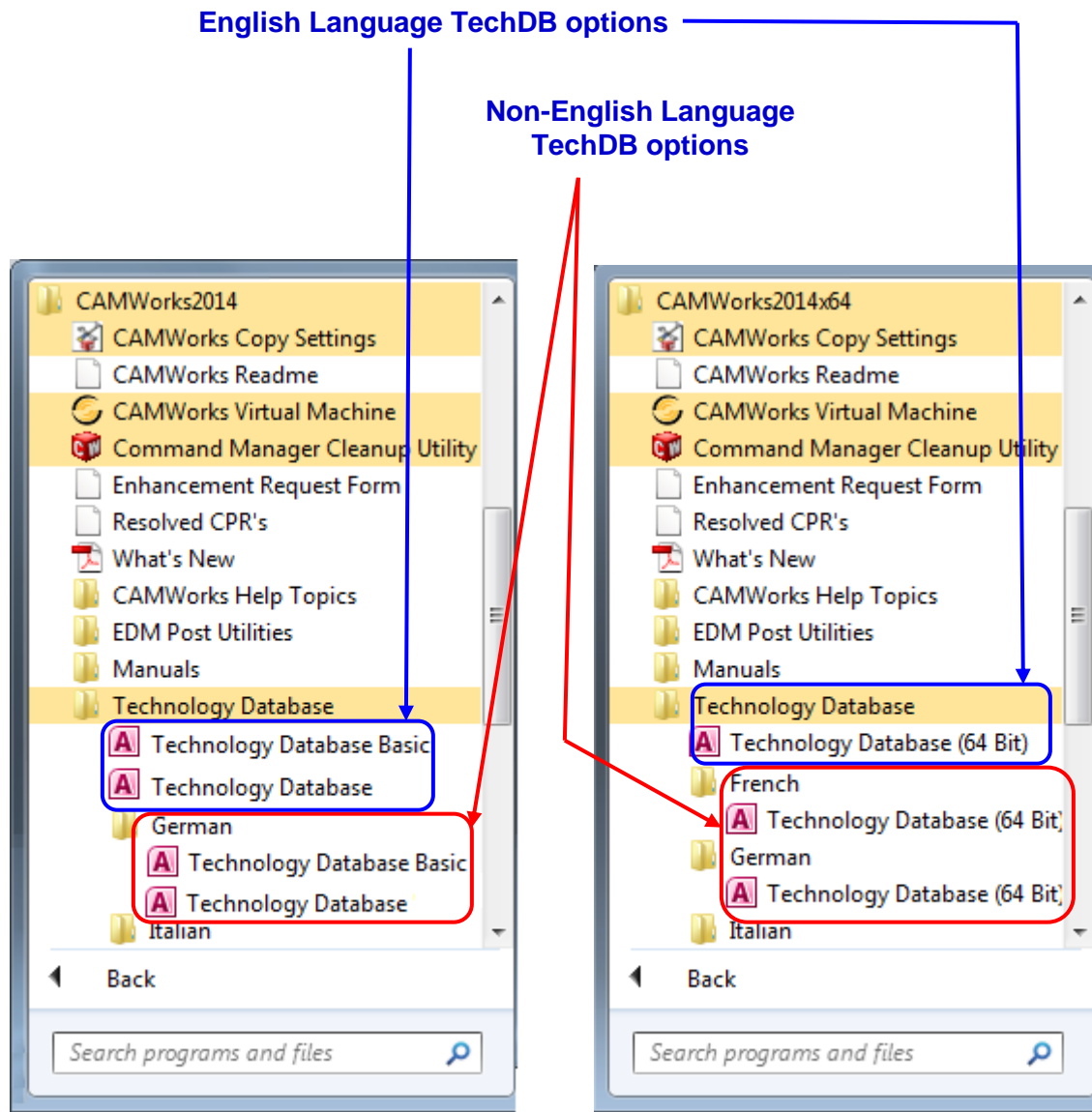
Opening non-English language TechDB from Windows Start menu

If you are using *CAMWorks* in a language other than English, then click **Start** on the Windows task bar and select

All Programs>> CAMWorks2014>>Technology Database>>xxx

Where **xxx** is the name of the language.

Under the **xxx** menu item, Technology Database option(s) will be displayed. These options are the same as those displayed for the English language version. Select the option as per your requirements.



Opening TechDB from Windows Start menu on 32-bit Systems

Opening TechDB from Windows Start menu on 64-bit Systems

Sharing the TechDB on a Network Drive


Sharing the TechDB on a network drive will be required in cases where more than one CAM engineer will be using a centralized knowledge base. If you have customized your Technology Database, then you need to move the customized TechDB to a shared folder so that all users can access a common TechDB repository.



Steps to move the TechDB to a shared location

1. Browse to the [default location where the TechDB files are installed](#) within the *CAMWorks* data folder.
2. From this folder, move the files ***TechDB.mdb*** and ***ReportDatabase.mdb*** to a shared folder location on the network. However, the [TechDBForms.mde/ TechDBFormsx64.mde/TechDBForms basic.mde](#) files.
3. After completing Step 3, [open the Technology Database](#) on the user's computer.
4. When Microsoft Access starts:
 - If you moved the TechDB files as mentioned in Step 2 and deleted files as mentioned in Step 3, then a message window displays to indicate the database cannot find the files and then the ***Database Link Wizard*** will be displayed.
 - If you moved the TechDB files as mentioned in Step 2 but not deleted files as mentioned in Step 3, the Main Menu for the TechDB is displayed. Under Maintenance in the TechDB navigation tree, click the ***Link Database*** item. The ***Database Link Wizard*** will be displayed.
5. In the Database Link Wizard, read the information in Step 1 and then click the ***Next*** button.
6. Use the ***Browse*** button to locate the ***TechDB.mdb*** that you moved and then click ***Next***.
7. Click the ***Start Linking*** button.
8. When the linking is completed, click the ***Finish*** button.
9. Click the ***Exit*** button to close the TechDB.

Verifying the successful linking of shared TechDB

1. Launch *CAMWorks* as an Add-In within SolidWorks/CAMWorks Solids. Open a part file.
2. On the CAMWorks Command Manager, click on the  ***CAMWorks Options*** button.
3. The ***Options*** dialog box is displayed.
The ***File Locations*** tab of this dialog box indicates the new location of the TechDB.



Using a SQL-based TechDB

By default, when you install *CAMWorks*, the Technology Database (TechDB) is supplied in the **Microsoft Access** database format. Microsoft Access forms provided with TechDB can connect to **SQL Server 2005** or **SQL Server 2005 Express** on the back end thereby providing client-server support. Thus, if desired, you can use a SQL-based TechDB.

'SQL Server 2005' and 'SQL Server 2005 Express' are Microsoft products. The purchase and installation of this software are separate from CAMWorks. Geometric Americas, Inc. does not provide support for installation, setup and database creation for SQL.

Pre-requisites for creating a SQL-based TechDB

1. Verify that you have a version of Microsoft Access: A full version or runtime version of **Microsoft Access 2003, 2007, 2010 or 2013** must be installed.
2. **Install the SQL Server:** SQL Server 2005 or SQL Server 2005 Express must be installed on the server.
3. **Create the SQL Database:** Use the *Restore Database* functionality in *SQL Server Management Studio* or *SQL Server Management Studio Express* to create the Technology Database from the **TechDB.bak** file that is installed in the *Drive:\CAMWorksData\CAMWorks2014\Lang\xxxx* folder when you install *CAMWorks*. The database can have any name.
4. Provide the necessary access rights for the users.

Creating a SQL-based TechDB for CAMWorks

You can link the TechDB to any valid SQL database and you can have any number of databases; however, you can only link to one database at a time.

Linking the SQL Database

1. [Open the Technology Database.](#)
2. After this Microsoft Access Database opens, expand the **Maintenance** item in the navigation tree and click **Link Database.**
3. Click **Next.**
4. On the Locating the Source page, enter the required information and click **Next.**
 - For *Link to*, select **SQL.**
 - Type the **Server Name.**



- Select the **Authentication Mode**: Windows Authentication (the default user ID you use to log in to Windows) or the SQL Authentication (specific SQL user).
 - Click the **Get Database** button and locate the database.
5. Click the **Start Linking** button. When the linking has completed, click **Finish**. The TechDB is now ready to use with *CAMWorks*.



9. UPDATE SUPPORT PLAN

When you purchase CAMWorks license from a Reseller, you will receive a CAMWorks license required to run the *CAMWorks* application. In addition to this, you will also be enrolled in a *CAMWorks Update Support Plan (USP)* for a specific duration. Your Reseller will brief you about the USP when you purchase *CAMWorks*.

Being enrolled in the CAMWorks Update Support Plan has the following benefits:

- **Receiving updates:** It allows you to keep your CAMWorks application up-to-date with the new features and performance improvements of CAMWorks released in the form of CAMWorks Releases and Service Packs.
- **Technical Support:** You receive technical support for all your queries and doubts regarding CAMWorks.
- **Newsletters:** Periodic newsletters and emails on current trends and improvements in CAMWorks.

Once your USP expires, you will no longer receive updates or support. Ensure that you repurchase an appropriate Update Support Plan from your CAMWorks Reseller to continue receiving technical support and updates.

Note: The CAMWorks license you purchase from your Reseller is usually perpetual in nature. However, the Update Support Plan has a fixed duration. You need to repurchase an Update Support Plan after your current plan expires.

Enrolling for an Update Support Plan

When you purchase the *CAMWorks* license for the first time, your CAMWorks Reseller will enroll you in an Update support Plan for a specific duration.

Once your Update Support Plan expires, you must enroll for a fresh Update Support Plan to continue keeping your CAMWorks system up-to-date with new features and performance improvements. Contact your CAMWorks Reseller to subscribe for a fresh plan.

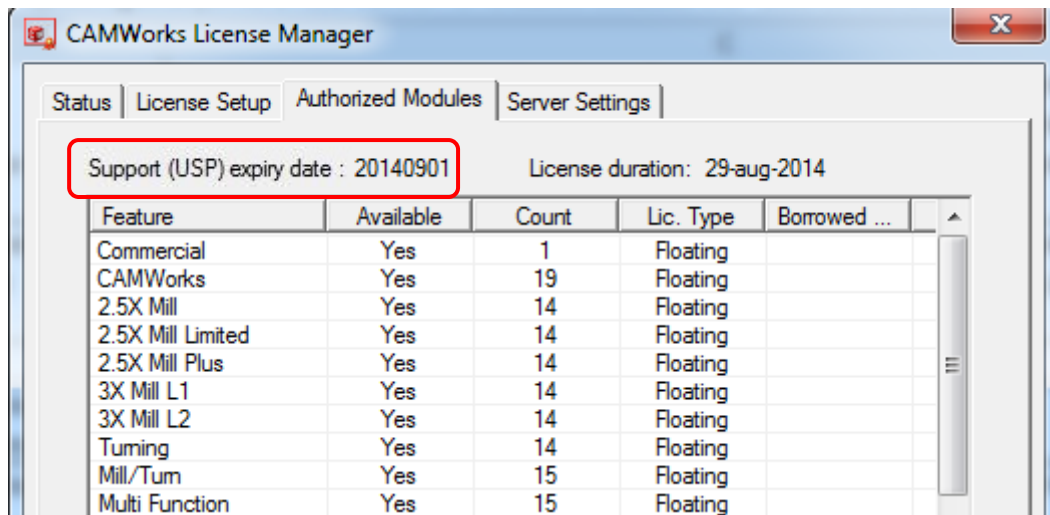
Viewing the Expiry Date of your Update Support Plan

You can verify the expiry date of your Update Support Plan using one of the following methods:



Method 1: Viewing USP Expiry Date in CAMWorks License Manager

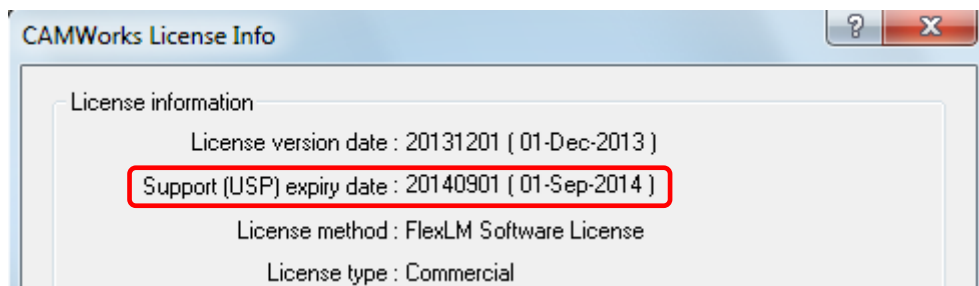
1. Open the **CAMWorks License Manager** utility on the client computer. (*Start>> Programs>>CAMWorks License Manager>>CW License Manager*)
2. Click on the **Authorized Modules** tab. The **Support (USP) expiry date** at the top left hand side of this tab indicates the expiry date of the Update Support Plan in YYYYMMDD format.



The Authorized Modules tab of the CAMWorks License Manager Dialog box

Method 2: Viewing Expiry Date of USP in License Info dialog box

1. Open CAMWorks as an Add-In within the SolidWorks/CAMWorks Solids environment.
2. Click on the **Help** menu and select **CAMWorks 2014>>License Info ...**. The **CAMWorks License Info** dialog box is displayed. The **Support (USP) expiry date**: at the top center of this dialog box indicates the expiry date of the Update Support Plan.



'Support (USP) expiry date' in the License Info Dialog box



Significance of the Expiry Date of your Update Support Plan

The Update Support Plan (USP) that you purchase is for a fixed duration, after which, you need to re-subscribe for a fresh Update Support Plan.

As long as you have an active USP, you can install the latest [CAMWorks Releases](#) and [Service Packs](#). Hence, the date of expiry of your Update Support Plan assumes importance.

Expiry Date of USP/ Support (USP) Expiry Date

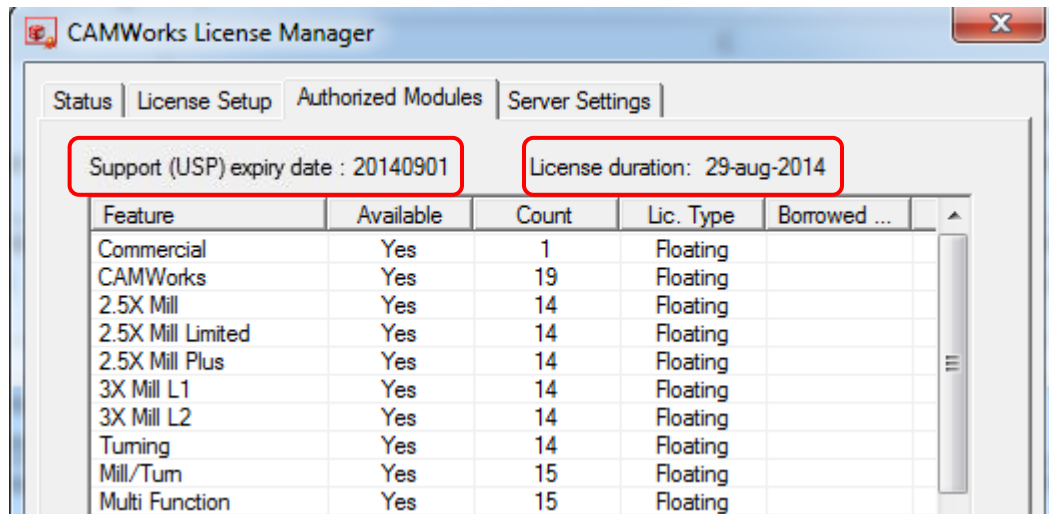
The **Support (USP) expiry date** field at the top left corner of the *Authorized Modules* tab in the *CAMWorks License Manager* dialog box and **Support (USP) expiry date** in the *CAMWorks License Info* dialog box indicate the **expiry date** of your *Update Support Plan* in **YYYYMMDD** format.

- If your *Support (USP) expiry date* is a date later than the current date, then it indicates that your *Update Support Plan* is active.
- If the *Support (USP) expiry date* is a date prior to the current date, then it indicates that your *Update Support Plan* has expired.
- You can install those *CAMWorks* versions/Service Packs which have a *License Version date* prior to or the same as the *Support (USP) expiry date*.
- When there are only 30 days or less remaining for your *Update Support Plan* to expire, a **Reminder message** will be displayed when you load *CAMWorks*. This message indicates the number of days remaining for your Update Support Plan to expire.
- In order to update an existing *CAMWorks* installation, you must currently be enrolled in a *CAMWorks* Update Support Plan and your *CAMWorks* license must be programmed to run this release. You need to contact your *CAMWorks* Reseller to re-activate your Update Support Plan and receive a new license. Once you receive the fresh license file/ .COD file, update the license.

License Duration

The **License duration** field at the top right corner of the **Authorized Modules tab** in the *CAMWorks License Manager* Dialog box indicates whether your *CAMWorks* license is perpetual or temporary in nature.

- If your *CAMWorks* license is [perpetual](#) in nature, then the **License duration** will be displayed as **'Permanent'**.
- If your *CAMWorks* License is [temporary or time-bound](#) in nature, then the expiry date of your license will be displayed in the **License duration** field in DD-Month-YYYY format.



The Authorized Modules tab of the CAMWorks License Manager Dialog box

Note:

- If your Update Support Plan expires (indicated by the Support (USP) expiry date), you can still continue using the licensed module (CAMWorks) till the expiry date of your license (indicated by the License Duration date).
- If your CAMWorks license is perpetual in nature, then you can use the licensed modules for ever.

However, in both the above cases, you can no longer avail the benefits associated with the Update Support Plan unless you renew the plan.



10. UPDATING THE CAMWORKS LICENSE

Fresh issue of Software License/ .COD File

You will be issued a new license when you purchase/renew your *Update Support Plan* or if you renew your temporary or time-bound license. In both the above cases, after you pay the applicable fees, Geometric Americas, Inc. will provide you with a fresh CAMWorks license file/ .COD file. You need to update your current license by replacing it with the fresh License file/ .COD file provided by Geometric Americas, Inc.

- ➔ If you use the licensing method of [FlexLM Software License](#), then a fresh license file will be emailed to you. Activate the new license using the *CAMWorks License Manager utility*.
- ➔ If you use the [standalone license](#) with a [Hardware Dongle](#), then you will be provided with a fresh .cod file. Activate the new license using the *CAMWorks License Manager utility*.

The following section explains how to update the CAMWorks license based on the combination of License type and method.

Updating a Standalone License using the FlexLM Software

The steps to be followed for updating the Standalone license are the same as that for activating the license. Refer: [Chapter 6: Activating the Standalone license using FlexLM Software](#)

Updating a Floating Network License

If you are updating a floating network license, you will be issued a license file, which is used to update only the Network Server.

When you receive a new license file for a floating network installation, follow the below steps to activate the new license file:

1. Log off all clients.
2. On the **Server computer**, open the *CAMWorks License Manager utility*. The *CAMWorks License Manager Dialog box* is displayed.
3. Click the **Server Settings** tab.
4. Click **Stop** to stop the **CAMWorks License Service**.
5. Click **Remove** to remove the License Service and the current license.
6. **Close** the *CAMWorks License Manager* and reopen it.



7. Once again, click on the **Server Settings** tab. Click on the *Browse* button next to the **License file path** field. **Browse** to the folder containing the new license file.
8. **Select** the new license file and click **Open**.
9. In the **Log file path** field, set the path for the log file.
10. Click the **Install CAMWorks License Server** button.
11. Click **Start** to start the License Server and thereby enable the new license.
12. Click **OK** to close the CAMWorks License Manager dialog box.

Note: No changes are required on the client computers.

Updating the Hardware Dongle License using CAMWorks License Manager

The steps to be followed for updating the hardware dongle license using the CAMWorks License Manager are the same as that for activating the license. Refer: [Chapter 7: Activating the Standalone License using the Hardware Dongle](#).

Updating the Hardware Dongle License using Key Manager

The steps to be followed for updating the hardware dongle license are the same as that for activating the license. Refer: [Activating the Hardware Dongle License using the Key Manager utility](#).



11. UPDATING THE CAMWORKS VERSION

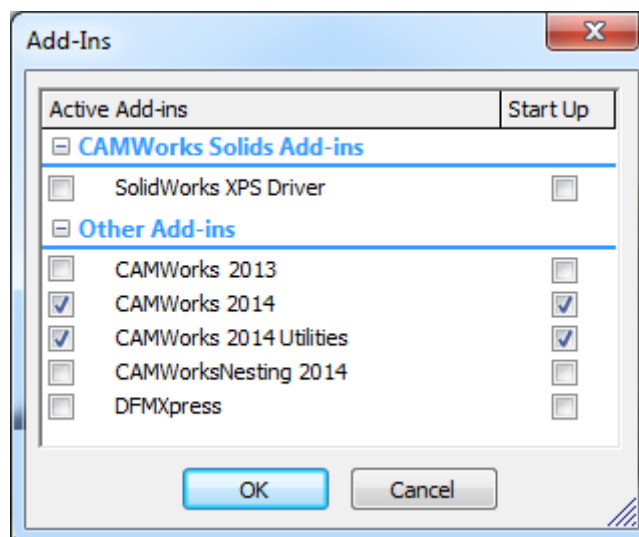
CAMWorks Releases

New CAMWorks versions are released annually. Installing the latest CAMWorks version allows you to keep your CAMWorks application up-to-date with the new features and performance improvements.

The CAMWorks version released for a particular year will be installed in a different folder from an existing previous release.

Example:

If you have **CAMWorks 2013** installed on your system and proceed to install **CAMWorks 2014**, then CAMWorks 2014 will be installed as a separate CAMWorks version. None of the existing files for CAMWorks 2013 will be overwritten. Both CAMWorks 2013 and CAMWorks 2014 will be listed as separate Add-Ins within SolidWorks/ CAMWorks Solids. You can run either version of CAMWorks by selecting the desired version from the SolidWorks/CAMWorks Solids Add-Ins.



CAMWorks Releases listed separately in Add-Ins Manager of SolidWorks/ CAMWorks Solids

Pre-requisites for installing a new CAMWorks Release

- Ensure that your system meets the [System Requirements](#).
- Ensure that you have a [compatible version of SolidWorks](#).
- Ensure that your [Update Support Plan](#) is active.



- As a precautionary measure, **do not uninstall** the previous version of *CAMWorks* before you install the new version of *CAMWorks*. Retain this installation temporarily to minimize potential upgrade problems and to ensure a smooth transition. You can uninstall the previous version after verifying that you have a *licensed CAMWorks 2014* version and after [importing customized data from your current TechDB into the CAMWorks 2014 TechDB](#)

CAMWorks Service Packs

Service Packs released periodically contain enhancements and bug fixes. The updates in the Service Pack are intended to update specific files of an existing *CAMWorks* installation.

Installing Service Packs

When a Service Pack is installed for a particular *CAMWorks* Release version, existing *CAMWorks* files will be overwritten.

Example

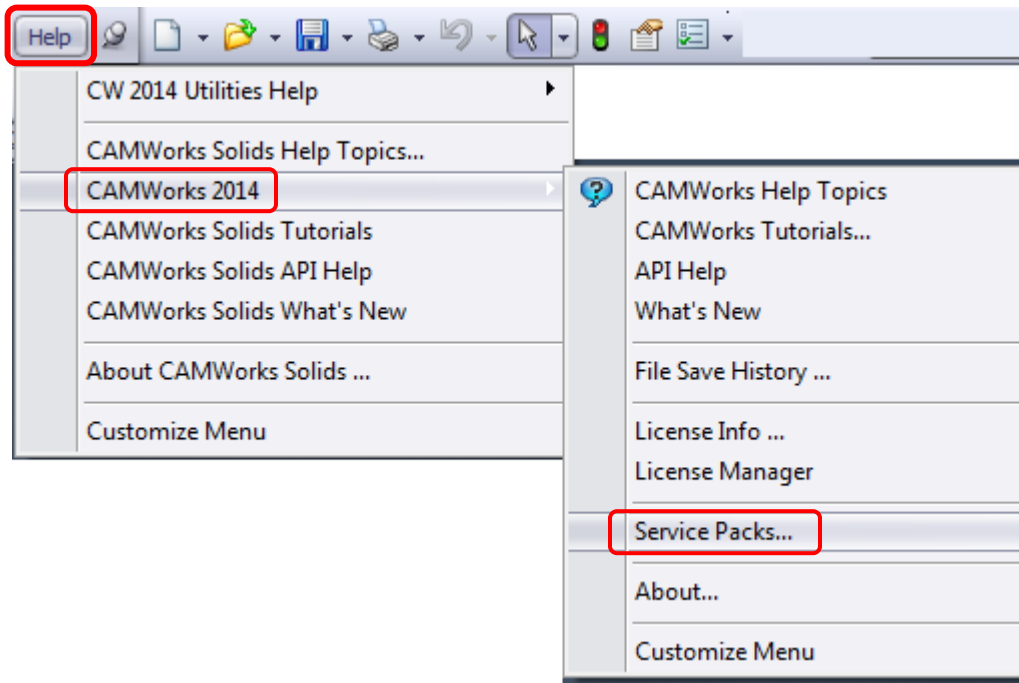
If you have ***CAMWorks 2014 SP0*** version installed on your system and proceed to install ***CAMWorks 2014 SP1*** version, then it will overwrite the installation files of ***CAMWorks 2014 SP0*** version. During the installation process, it will automatically link the existing Technology Database to the upgraded version. Note that *CAMWorks 2014 SP0* and *CAMWorks 2014 SP1* versions will not be installed as separate installations. When you launch the upgraded version as an Add-In within SolidWorks/*CAMWorks* Solids, only *CAMWorks 2014* will be listed. The Service Packs for the *CAMWorks 2014* Release will not be listed as separate Add-Ins.

Note: The latest *CAMWorks* installers and Service Packs are available in the Downloads section of the [CAMWorks website](#). Contact your *CAMWorks* Reseller for availing the permissions required to access this website.

Checking for Service Packs

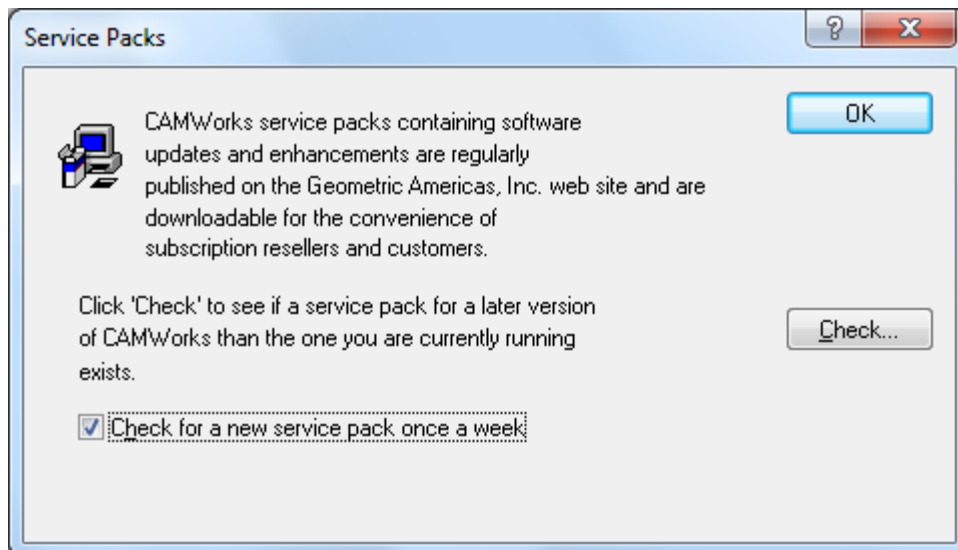
CAMWorks provides an option wherein you can periodically check for the availability of the latest service packs for the installed *CAMWorks* Release.

1. Click on the **Help** menu of SolidWorks/*CAMWorks* Solids.
2. Select ***CAMWorks 2014*** from the Help pull-down menu. A cascading menu is displayed.
3. Select ***Service Packs...*** item from this cascading menu.



Selecting Service Packs command from the Help menu

4. The *Service Pack* dialog box is displayed. This dialog box provides a method of determining whether a newer service pack of the CAMWorks version is available for download.



Service Packs Dialog Box



5. Click the **Check...** button to find out if a newer build of CAMWorks is available from the CAMWorks website.
6. Select the **Check for a new service pack once a week** option to automatically check for service packs on a weekly basis.

License Version Date of CAMWorks Release

Each time a new CAMWorks Version or Service Pack is released, a **License version date** indicating the version of the installer is associated with it.

Significance of the License Version Date

The *License version date* indicates whether you are eligible to use the updated version or Service Pack of the CAMWorks application. If your expiry date of your [Update Support Plan](#) (listed as [Support \(USP\) expiry date](#) in the *CAMWorks License Info* dialog box) is greater than the License Version Date of the *CAMWorks* version, then you are eligible for the update.

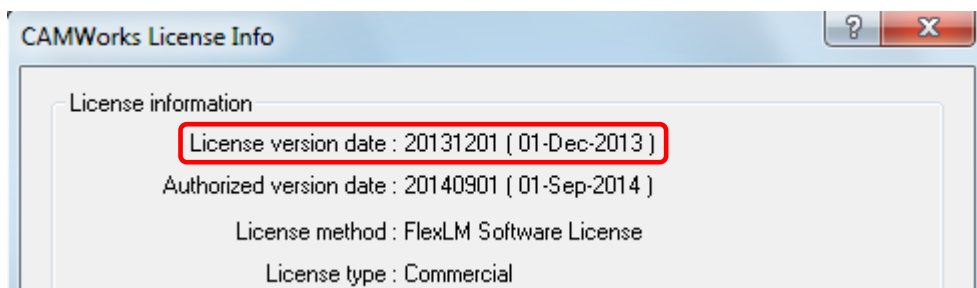
Example:

Suppose that the *License Version Date* of the new version/Service Pack of CAMWorks is December 1, 2013 [20131201] and the *Support (USP) expiry date* for your CAMWorks license is September 01, 2014 [20140901]. The *Support (USP) expiry date* indicates that your Update Support Plan (USP) will expire only on September 01, 2014. Hence, since the *License version date* of the new version/Service Pack is a date prior to the USP expiry date, you are eligible to install and run the new version/Service Pack.

Viewing the License Version Date

You can verify the expiry date of your *Update Support Plan* using one of the following methods:

- The License Version date of a *CAMWorks* version is mentioned in the *ReadMe* file. The *ReadMe* file for the version installed on your system can be accessed from **Start>>Programs>>CAMWorks2014>>CAMWorks ReadMe**.
- Open CAMWorks as an Add-In within the SolidWorks/CAMWorks Solids environment. Click on the **Help** menu and select **CAMWorks 2014>>License Info ...** The *CAMWorks License Info* dialog box is displayed. The **License version date** is given at the top of this dialog box.



'License Version date' in the License Info Dialog box

Note: For the CAMWorks 2014 SP1 version, the License version date is December 01, 2013.



12. UPDATING THE TECHNOLOGY DATABASE

Topics covered in this chapter:

- [Automatically linking of TechDB on upgrading CAMWorks version with a Service Pack](#)
- [Creation of TechDB Backups on installing Service Packs](#)
- [Importing customized TechDB data from previous Release to new Release of CAMWorks](#)
 - [Procedure to Import customized TechDB data](#)
 - [Procedure to Import customized Setup Sheet Templates](#)
 - [Procedure to Import Customized Report Templates](#)
- [Importing Customized Data into a SQL-based TechDB](#)

Automatic linking of TechDB on upgrading the CAMWorks version

New *CAMWorks* versions are made available from time to time in the form of [CAMWorks Releases](#) and [Service Packs](#). *CAMWorks* Releases are made on an annual basis while *Service Packs* contain updates for a specific *CAMWorks* Release.

The updates in a *Service Pack* are intended to update specific files of an existing *CAMWorks* installation. If you upgrade your installed *CAMWorks* installation with a *Service Pack*, then specific files of your existing *CAMWorks* installation will be overwritten. While the *Service Pack* is being installed, it will automatically link the existing *Technology Database* to the upgraded version. This automatic linking ensures that any customized data present in your existing *CAMWorks* installation is thus present in the upgraded version.

Example:

If you have *CAMWorks 2014 SP0* version installed on your system and proceed to install *CAMWorks 2014 SP1* version, then it will overwrite the installation files of *CAMWorks 2014 SP0* version. During the installation process, it will automatically link the existing *Technology Database* to the upgraded version. Note that *CAMWorks 2014 SP0* and *CAMWorks 2014 SP1* versions will not be installed as separate installations.

Creation of TechDB Backups on installing Service Packs

When you update an existing installation of *CAMWorks* with a *Service Pack* release, before the *Setup* program removes your current files, it will create



copies of the existing **TechDB.mdb** and **ReportDatabase.mdb** files located in the **Lang\xxxx** folder to a backup folder as follows:

- Each time the Setup program is run to update an existing installation with a Service Pack, a new **\backup\xxxx\backup_nn** folder is created inside the **CAMWorks** folder where:

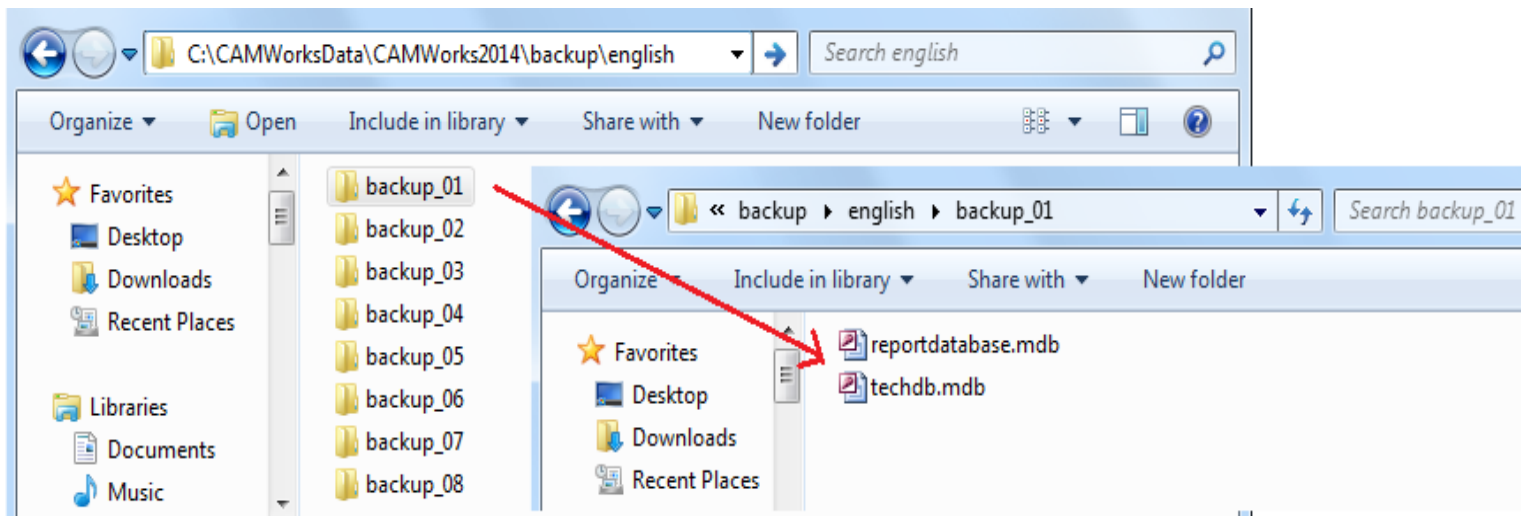
xxxx is a language

nn is a number ranging from 01-10

Example:

`\\CAMWorksData\CAMWorks2014\backup\English\backup_01`

- After 10 backups have been created, the Setup program deletes the **backup_01** through **backup_05** folders. The **backup_06** through **backup_10** folders are then renamed to **backup_01** through **backup_05** and the backup files for the next installation are stored in the **backup_06** folder.



Backup files of TechDB.mdb and ReportDatabase.mdb created in Backup folders

Importing TechDB data on upgrading to a new CAMWorks Release

CAMWorks Releases are made on an annual basis. When you upgrade your existing **CAMWorks** version with a new Release, the new **CAMWorks** Release will be installed in a separate folder and as a separate installation. The default TechDB available with the new **CAMWorks** Release will be associated with it. This new **CAMWorks** version will not run with a previous version of the Technology Database. Copying the previous TechDB files into the new version is not a solution since it will not work.



In case you have customized data in your existing TechDB, then you will need to import the customized data in the TechDB of the previous version into the TechDB of the new version by using the **Import Data Wizard**.

For steps on how to import customized TechDB data, Setup Sheet Templates and Report templates after upgrading the *CAMWorks* version, refer the following sections in this chapter:

- [Procedure to Import customized TechDB data](#)
- [Procedure to Import customized Setup Sheet Templates](#)
- [Procedure to Import Customized Report Templates](#)

Example:

If you have **CAMWorks 2013** installed on your system and proceed to install **CAMWorks 2014**, then *CAMWorks 2014* will be installed as a separate *CAMWorks* version. None of the existing files for *CAMWorks 2013* will be overwritten. Both *CAMWorks 2013* and *CAMWorks 2014* will be listed as separate Add-Ins within SolidWorks/CAMWorks Solids. The *CAMWorks 2014* Release will have the default TechDB associated with it. You will need to import customized data from your existing TechDB into the TechDB of this newly installed version.

Note: We recommend that you keep your previous version temporarily to minimize potential upgrade problems and ensure a smooth transition. You can uninstall the previous version after verifying that you have a licensed *CAMWorks 2014* version and after importing customized data from your current TechDB into the *CAMWorks 2014* TechDB.

Procedure to Import customized TechDB data

Pre-requisite: The customized TechDB.mdb file

The customized **TechDB.mdb** file is required for importing TechDB data into the new version of *CAMWorks*. The folder location of this customized *TechDB.mdb* file can be located using any one of the following methods:

- **For Standalone license:** Retain the existing version of *CAMWorks* temporarily when you install **CAMWorks2014**. If the previous version installed is *CAMWorks2013*, then the default location of *TechDB.mdb* will be:

Drive:\CAMWorksData\CAMWorks2013\Lang\xxx (for 32-bit systems)

Drive:\CAMWorksData\CAMWorks2013\Lang\xxx (for 64-bit systems)

Where xxx is the language



- **For Floating License:** If you are running *CAMWorks* on a network and have [shared the TechDB over the network](#), the customized data will be located in the *TechDB.mdb* that has been moved to a folder on a network drive.
- **From Backup folder:** If you have updated the existing version of *CAMWorks* with a Service Pack prior to installing the new *CAMWorks 2014* Release, then you can use the backup *TechDB.mdb* created by the Setup program. This file is in the `\backup\English\backup_nn` folder of the previous version inside the *CAMWorks* data folder.

Refer: [Creation of TechDB Backups on installing Service Packs](#) for more information.

Example:

If the previous version installed is *CAMWorks2013*, then the *TechDB.mdb* might be located at:


Drive:\CAMWorksData\CAMWorks2013\backup\xxx\ backup_nn

Where:

- `xxx` is the language
- `nn` is the backup number ranging from 01 to 10

Note: If there are multiple backups of the *TechDB.mdb* in the backup folder, then the `backup_nn` folder with the highest number contains the latest *TechDB.mdb*.

Procedure to Import customized TechDB Data into New TechDB

1. Install **CAMWorks 2014** and use one of the following methods to start the new TechDB:
 - Launch *CAMWorks* as an Add-In within SolidWorks/CAMWorks Solids. On the CAMWorks Command Manager, click on the  **Technology Database** button.
 - Click **Start** on the Windows task bar and select **All Programs>>CAMWorks2014>>Technology Database>>Technology Database**.
If you are using CAMWorks in a particular language, then select **All Programs>>CAMWorks2014>>Technology Database>> xxx>>Technology Database**

where `xxx` is the name of the language



- Using Windows Explorer, open the file **TechDBForms.mde** located in the `\Lang\xxx` folder of the **CAMWorks** installation folder.
2. Expand the Maintenance item in the navigation tree and click **Import Database**.
3. The **Import Wizard** is displayed. After reading the first screen of the **Import Wizard**, click the **Next** button to continue.
 - The **Step 2** dialog box of **Import Wizard** displays the locations of the current database and the source database, which is the database that contains existing user defined data.
4. If the location of your source **TechDB.mdb** is not correct, use the **Browse** button to set the correct location, then click the **Next** button.
 - **Step 3** dialog box of **Import Wizard** allows you to create a backup of the new database in the event that the update procedure fails. The original database with user data is not changed during this process. However, we strongly recommend that you select and make a Backup.
5. Click the **Backup** button. A backup is created in the same folder as the **TechDB.mdb** and is named Backup of **TechDB.mdb**.
6. When the backup is done, click the **Next** button. **Step 4** dialog box of **Import Wizard** begins the data importing process.
7. Select the data to be imported (Mill and/or Turn), then click the **Import** button. The process may take a few minutes.
8. When finished, click the **Next** button, then click the **Compact** button. This command compacts the database to decrease the file size and thereby improve performance. The process may take a few minutes.
9. When finished, click the **Finish** button. The Main Menu of the Technology Database is displayed.
10. Click the **Quit** button. The new **CAMWorks** TechDB now includes data entered in the previous version of the TechDB.

Procedure to Import customized Setup Sheet Templates

If you have created customized templates for Setup Sheets and/or you want to retain the Setup Sheet data for existing parts, you can import the information which was present in the previous Report Database to the new Report Database of the new **CAMWorks** version.

Following are the steps to import Setup Sheet data that was generated in the Report Database of the previous **CAMWorks** version to the new version:

1. Close **CAMWorks** and **SolidWorks/CAMWorks Solids**.



2. In Windows Explorer, open the **ReportDatabase.mdb** for the *CAMWorks2014* version located in the in the \Lang\xxxx folder in the **CAMWorks2014** data folder.

Example: Drive:\CAMWorksData\CAMWorks2014\Lang\English

3. Select **Setup sheet** on the menu bar and choose **Import Setup Sheets**. The **Import Setup Sheet Wizard** dialog box is displayed.
4. Type the path to the previous **ReportDatabase.mdb** of the previous *CAMWorks* version or browse to locate the folder containing this file and click **Import**.
 - When you install *CAMWorks 2014* in a new folder, the *ReportDatabase.mdb* file of the previous version is located in the \Lang\xxxx folder under the main folder for the previous version.

Example:

If the previous version is *CAMWorks2013*, then the *ReportDatabase.mdb* might be located at:

Drive:\CAMWorksData\CAMWorks2013\Lang\xxxx

- If you have updated your existing *CAMWorks* installation with a Service Pack prior to the new *CAMWorks* Release, then the Setup program creates a backup of *ReportDatabase.mdb* in the same \backup\xxxx\backup_nn folder as the *TechDB.mdb* file.

Example:

If the previous version is *CAMWorks2013*, and it was upgraded with a Service Pack, then the *ReportDatabase.mdb* might be located at:

Drive:\CAMWorksData\CAMWorks2013\backup\English\ backup_01

Refer: [Creation of TechDB Backups on installing Service Packs](#) for more information.

5. Click the **Finish** button when the process is finished.
6. Click the **Setup Sheet Browser** button and confirm the data has been imported.

Procedure to Import Customized Report Templates

If you have created customized Report templates, you can import this information which was present in the previous Report Database to the Report Database of the new *CAMWorks* version.

Following are the steps to import Report Templates data that was generated in the Report Database of the previous *CAMWorks* version to the new version:

1. If you are also importing Setup Sheet data, import the data first as explained in: [Procedure to Import customized Setup Sheet Templates](#)



2. Make sure each report template you want to import has a unique name that is not the same as one of the default templates supplied.

Because the supplied templates cannot be imported, the recommended procedure for creating new templates is to create a new report or copy one of the provided templates and modify the copy.

3. **Exit** CAMWorks and SolidWorks/CAMWorks Solids.
4. In Windows Explorer, open the **ReportDatabase.mdb** for the *CAMWorks2014* version located in the in the \Lang\xxxx folder in the **CAMWorks2014** data folder.

Example: Drive:\CAMWorksData\CAMWorks2014\Lang\English

5. Select **Window** on the menu bar, choose **Unhide** in the Unhide Window dialog box and then click **OK**.
6. Select **File** on the menu bar and choose **Get External Data**, then **Import**.
7. In the *Import* dialog box, locate the previous Report Database file and click **Import** (for information on locating the file, see [Step 4 in the Procedure to Import Customized Setup Sheet Templates](#)).
8. In the **Import Objects** dialog box, click the **Reports** tab, select the templates you want to import and click **OK**. The imported templates display in the list on the *Reports* tab.

Importing Customized Data into a SQL-based TechDB

If the TechDB for your previous *CAMWorks* installation was SQL-based and it contained customized data, then you will need to import this customized data into the new SQL-based TechDB after installing a new version of *CAMWorks*.

Following are the steps to import customized data in SQL-based TechDB of previous version into SQL-based TechDB of the new *CAMWorks* version that you install.

1. Install **CAMWorks 2014**.
2. Create a SQL-based TechDB for this version by following the steps given in [Pre-requisites for creating a SQL-based TechDB](#) and [Creating a SQL Database for CAMWorks](#).
3. Use one of the following methods to start the Technology Database in Microsoft Access:
 - Select **Start** on the Windows task bar and select **All Programs>>CAMWorks2014>>Technology Database>>Technology Database**.
 - In Windows Explorer, open the file **TechDBForms.mde** located in the *Drive:\CAMWorksData\CAMWorks2014\Lang\xxx* folder.



4. After this Microsoft Access Database opens, expand the **Maintenance** item in the navigation tree and click **Import Database**. The Import Wizard is launched.
5. Select an *Import* Option:
 - **Access to SQL**: To import data from a Microsoft Access database to an SQL database that has already been linked. If you select this option, browse to the database file containing the data to be imported.
 - **SQL to SQL**: To import data from one SQL database to an SQL database that has already been linked. If you select this option, the information for the currently linked database is on the left. On the right, enter the required information for the database containing the data to be imported.
6. Click the **Next** button. The data importing process may take a few minutes.
7. Click the **Finish** button. The currently linked TechDB now includes the imported data.



APPENDIX SECTION



APPENDIX A: INSTALLING OPTIONAL PROGRAMS

A number of Optional programs which work in supplementary capacity to CAMWorks are available on the CAMWorks website. Some of these programs require licensing in order to run.

Given in this section is a list of all such optional software programs along with their description, licensing info and installation info.

Universal Post Generator

CAMWorks uses a post processor to convert information into machine tool specific NC code. Each post processor is designed to generate quality NC code that meets the requirements of the machine control. The Universal Post Generator allows you to customize the post processor for both basic and complex code generation requirements.

Licensing for Universal Post Generator

You don't need a separately purchased license to run the Universal Post Generator. To install this software, make sure you have CAMWorks installed on your system.

Installing Universal Post Generator by downloading Installer

Following are the steps to download and install *Universal Post* from the CAMWorks website:

1. Open the website www.CAMWorks.com
2. Login using the **Username** and **Password** provided to you by your CAMWorks Reseller.
3. After successfully logging in, click on the **Downloads Area** button on the right.
4. The *Customer Area* webpage will be displayed. Click on the link for **Miscellaneous Downloads**. The *Miscellaneous Files Downloads* webpage is displayed.
5. Click on the hyperlink for **Universal Post Generator** in order download the installer.
6. After downloading the installer, run then installer in order to install the program.



Customer Area - CAMWorks: CNC CAD/CAM Software within SolidWorks and Solid Edge - Windows Internet Explorer

http://www.camworks.com/customer-support/customer-area/

File Edit View Favorites Tools Help

Convert Select

Customer Area - CAMWo... x

Home Feeds (J)

CAMWorks: CNC CAD/CAM Software within So...

Support

CAMWorks Forums | FAQ | Certified Technicians | Customer Area | Videos

Customer Area

Welcome to the CAMWorks Customer Area

Here you can find the download links for CAMWorks, CAMWorks Solids, and other miscellaneous files. We hope the Customer Area provides the information you require and we welcome any feedback or suggestions you may have for improvements.

Submit if assistance is required with a licensing/ registration issue for a purchased product

- [CAMWorks Downloads](#) Access the latest CAMWorks files
- [CAMWorks Solids files](#) Access the latest CAMWorks Solids files
- [CAMWorks Nesting Files](#) Download the latest CAMWorks Nesting files
- [Miscellaneous Downloads](#) Universal Post Generator

Request A Demo

Reseller Locator

Downloads Area

Reseller Area

Hyperlink for Miscellaneous Downloads on the CAMWorks Website

Predator CNC Editor 2008

The Predator CNC Editor includes 3 integrated modules:

- **CNC Editor** with dozens of CNC intelligent editing commands, Microsoft® Word compatible menus, toolbar, and shortcut keys.
- **File Compare module** with synchronized scrolling and line-by-line edit/change review.
- **DNC module** to send, receive and DNC to any RS-232 compatible CNC machine. Supports an unlimited number of different CNC machines with appropriate hardware.

Licensing for Predator CNC Editor

In order to run this program, the built-in software license or hardware dongle of CAMWorks must be programmed to run Predator CNC Editor. Contact your CAMWorks Reseller to purchase the license required to use this software.

Installing Predator CNC Editor 2008 by downloading Installer

Following are the steps to download and install *Predator CNC Editor 2008* from the CAMWorks website:

1. Open the website www.CAMWorks.com



2. Login using the **Username** and **Password** provided to you by your CAMWorks Reseller.
3. After successfully logging in, click on the **Downloads Area** button on the right.
4. The *Customer Area* webpage will be displayed. Click on the link for **Miscellaneous Downloads**. The *Miscellaneous Files Downloads* webpage is displayed.
5. Click on the hyperlink for **Predator CNC Editor 2008** in order to download the installer.
6. After downloading the installer, run then installer in order to install the program.

ElectrodeWorks

ElectrodeWorks (Electrodes for CAMWorks), is an optional module used to design electrodes for electrical discharge machining. The comprehensive and easy to use interface, automates all aspects of the calculation and design of EDM electrodes including design, management, documentation and manufacturing.

The 32-bit or 64-bit version of *ElectrodeWorks 2013* can be [downloaded from the CAMWorks website](#).

Licensing For ElectrodeWorks

In order to run ElectrodeWorks, your CAMWorks license must be programmed to run the ElectrodeWorks module. Contact your CAMWorks Reseller in order to procure the license for ElectrodeWorks.

Installing ElectrodeWorks by downloading Installer

Following are the steps to download and install ElectrodeWorks from the CAMWorks website:

1. Open the website www.CAMWorks.com
2. Login using the **Username** and **Password** provided to you by your CAMWorks Reseller.
3. After successfully logging in, click on the **Downloads Area** button on the right.
4. The **Customer Area** webpage will be displayed. Click on the link for **CAMWorks Downloads**.
5. The *CAMWorks Files Downloads* webpage is displayed. Scroll down to the section of the webpage containing hyperlinks for downloading ElectrodeWorks.



CAMWorks: CNC CAD/CAM Software within So... 146 + New SEO

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ElectrodeWorks Installation

NOTE: If you have a previous installation of ElectrodeWorks that uses an ElectrodeWorks temporary license, you must uninstall that version before installing the version below.

File	Date (dd-mm-yyyy)	Size	Notes
CAMWorksElectrodeWorks 2013-SP0	08-Nov-2013	37 MB	32-bit-SP0 Release version of CAMWorks ElectrodeWorks 2013
CAMWorks2011x64-SP2.3	08-Nov-2013	38 MB	64-bit-SP0 Release version of CAMWorks ElectrodeWorks 2013

Hyperlinks for the ElectrodeWorks Installers on the CAMWorks Website

6. Depending on whether you have a 32-bit system or a 64-bit system, click on the appropriate hyperlink.
7. After downloading the installer, run then installer in order to install the program. Follow the simple steps given in the Installation Program in order to complete the installation.

CAMWorks Nesting

CAMWorks Nesting is an automatic, true-shape nesting program from Geometric Americas, Inc. that easily creates fast and efficient nested layouts. CAMWorks Nesting uses NestLib®, one of the fastest and most capable automatic true-shape nesting technology engines available in the industry. It is seamlessly integrated within SolidWorks/ CAMWorks Solids and allows nesting of flat or 3D solid or sheet metal parts and assemblies. The nested output is a SolidWorks assembly file for each unique sheet layout. CAMWorks Nesting can be used to create efficient layouts of metal, wood or composite based materials, producing the maximum number of parts from a single piece of raw material within minutes.

Licensing For CAMWorks Nesting

A valid license is required to run CAMWorks Nesting. When installed, CAMWorks Nesting can be run without a license for a trial period of 30 days. After the trial period expires, contact your CAMWorks Reseller to procure the license for CAMWorks Nesting.



Installing CAMWorks Nesting by downloading Installer

Following are the steps to download and install CAMWorks Nesting from the CAMWorks website:

1. Open the website www.CAMWorks.com
2. Login using the **Username** and **Password** provided to you by your CAMWorks Reseller.
3. After successfully logging in, click on the **Downloads Area** button on the right.
4. The *Customer Area* webpage will be displayed. Click on the link for **CAMWorks Nesting Files**.
5. Depending on whether you have a 32-bit system or a 64-bit system, click on the appropriate hyperlink to download the installer.

After downloading the installer, run then installer in order to install the program. Follow the simple steps given in the Installation Program in order to complete the installation.



APPENDIX B: CAMWORKS LICENSE MODULES

The CAMWorks application consists of numerous modules. Separate CAMWorks modules are available for 2½ Axis Milling, 3 Axis Milling, Rotary Milling, 3 Axis with undercut, Wire EDM, Turning, Machine Simulation, etc.

You need to purchase the desired CAMWorks modules based on your machining requirements.

When you purchase CAMWorks modules from your CAMWorks Reseller, you will receive a CAMWorks license file (either [standalone](#) or [floating](#)) required to run the CAMWorks modules. This CAMWorks license file you receive contains information on all the CAMWorks modules you are licensed to run. Once this license is activated, you can proceed to use the CAMWorks modules.

Topics covered in this section:

- [Viewing the CAMWorks Modules you are licensed to run](#)
- [List of CAMWorks Modules and their functionalities](#)
- [Selectively activating CAMWorks modules on a floating network](#)
- [Maximum Permissible Concurrent Users on a Floating Network](#)

Viewing the CAMWorks Modules you are licensed to run

Viewing CAMWorks Modules in the CAMWorks License Info dialog box

1. Open CAMWorks as an Add-In within the SolidWorks/CAMWorks Solids environment.
2. Click on the **Help** menu and select **CAMWorks 2014>>License Info**. The [CAMWorks License Info](#) dialog box is displayed.
3. The **Modules** column of the *License Info* dialog box lists the CAMWorks modules you are licensed to run.
 - If you have a standalone (node-locked) license, all the licensed modules are checked and grayed out. With a standalone license, multiple sessions of CAMWorks can be run on the same PC.
 - If you are a client on a floating network license, the list of modules is enabled. To access the functions of an available module, check the box to the left of the module name.
4. The **Available** column indicates the number of licenses currently available for each listed module.
 - For a client on a floating network license, the number indicates how many licenses are available for each module.



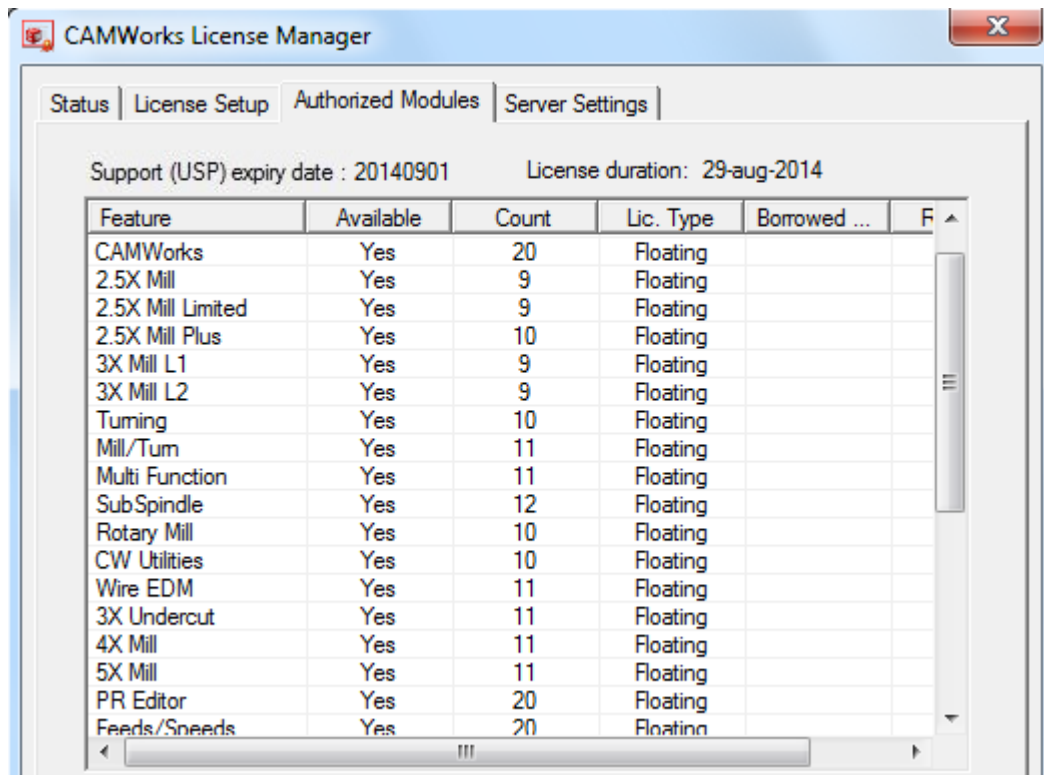
For example, if there are **20** licenses of a CAMWorks module available on a floating network and **3** of them are being used by client computers, then the *Available* column will display '17'.

- If the module is unchecked and the *Available* column displays '0', it indicates that no licenses for that particular module are available to the client since all of them are in use by other clients.
- If '1' or a higher number is displayed, it means that license for that particular module is available for use.
- For a borrowed license, the *Available* column will display '1'.
- For a standalone (node-locked) license, the *Available* column will display '1' against each module and will be grayed out.

5. The **Update Licenses** button updates/refreshes the availability of modules on a floating network license.

Viewing CAMWorks Modules in the CAMWorks License Manager Dialog

1. [Open the CAMWorks License Manager utility.](#)
2. The *CAMWorks License Manager* Dialog box is displayed. Click on the *Authorized Modules* tab.



Authorized Modules tab of CAMWorks License Manager Dialog Box



Feature column

- The first row of the *Feature* column indicates the [mode of your CAMWorks license](#) (Commercial/ Educational/ etc.)
- The second row of the *Feature* column indicates the name of the software product purchased (CAMWorks/CAMWorksXpress). The *Count* field in the second row indicates the number of floating CAMWorks licenses currently available.
- From third row onwards, all the CAMWorks modules you are licensed to run are listed.

Available column

- Yes in the **Available** column indicates that the particular module is available for use.
- No in the **Available** column indicates that the particular module is not available for use as it is currently being used by other clients on the floating network. (The *Count* column field will display '0' to indicate that all the licenses for the module are currently in use.)

Count column

- For a Standalone (Node-locked) license, the *Count* column will display **Uncounted** since only a single license for each module is available.
- For a floating network license, the *Count* column indicates the number of licenses currently available for use. For example, if you have purchased 20 licenses for a module and 13 of them are currently in use, then the *Count* column will indicate the number '7'. If all licenses are being used, the column will display '0'.
- On a floating network license, if the license for a particular [CAMWorks module has been borrowed](#) by the client, then the *Count* column will display **Uncounted** for that particular module as long as the license stands borrowed. Note that this will be displayed only on the client computer borrowing the module and not on other client computers.

Lic. Type column

The **Lic. Type** column indicates whether the license for a particular module is *Node-locked* or *Floating* in nature. If a client has borrowed the license for a CAMWorks module on a floating network, then the **Lic. Type** column will indicate *Node-locked* on that particular client.



List of CAMWorks Modules and their Functionalities

Listed below are all the CAMWorks modules and the functionalities they support. When you purchase CAMWorks, your CAMWorks Reseller will provide you with a combination of CAMWorks modules based on your machining requirements.

CAMWorks Modules for 2.5 Axis Mill Machining

The following CAMWorks modules are associated with 2.5 Axis Mill Machining:

'2.5X Mill Limited' module

This module enables *Automatic Feature Recognition (AFR)* and *Interactive Feature Recognition (IFR)* only for those 2.5 Axis features in negative Z direction.

'2.5X Mill' module

This module enables *Automatic Feature Recognition (AFR)* and *Interactive Feature Recognition (IFR)* for 2.5 Axis features from all directions.

'VoluMill 2.5X' module

This CAMWorks module enables the Milling toolpath engine for 2.5 Axis Roughing Operations. It is ideal for prismatic parts as its algorithms result in more intelligent toolpaths to machine pockets, slots, and arbitrary shapes. It can be used with any material, including the hardest metals. The result is increased efficiency and utilization of machines, tools, labor and materials.

CAMWorks Modules for 3 Axis Mill Machining

The following CAMWorks modules are associated with 3 Axis Mill Machining:

'2.5X Mill Plus' module

This module enables *Automatic Feature Recognition (AFR)* and *Interactive Feature Recognition (IFR)* for 2.5 Axis features from all directions. In addition to 2.5 Axis Machining, basic 3 Axis Machining using the following 3 Axis operations will also be enabled:

- Area Clearance
- Z Level
- Flat Area

'3X Mill L1' module

The **3X Mill L1** module (where 'L' stands for Level) enables the generation of the following 3 Axis operations:



- Area Clearance
- 3 Axis Finish Mill
- Pencil Mill
- Z Level
- Legacy Rough Mill
- Pattern Project
- Constant Stepover

'3X Mill L2' module

The **3X Mill L2** module (where 'L' stands for Level) enables the generation of the following 3 Axis operations:

- Curve Project
- Flat Area

'3X Undercut' module

If a part contains undercuts relative to the Z machining direction, then this module will allow the 3 Axis operations to machine the undercut areas. Note that machining of undercut areas is only possible using special Mill tools which have undercuts such as Dovetail tool, Face Mill tool, Keyway tool, Lollipop tool or User Defined tool.

This module allows insertion of Multiaxis Mill operations. However, instead of 4 Axis or 5 Axis, the number of axis will be 3 (thus a 3 Axis Mill operation). 3 Axis operations generated in such a manner will result in the machining of the undercut areas.

'VoluMill 3X' module

This CAMWorks module enables the VoluMill Roughing Strategy for 3 Axis Roughing Operations. It is ideal for complex 3D shapes as its algorithms result in highly efficient toolpaths by exploiting the capabilities of modern machining hardware to control the material removal rate. VoluMill's unique approach to high speed material removal allows the programmer to determine the optimum material removal rate for any combination of part geometry, material, machine, and cutting tool. Material is removed in the most effective way possible. Consequently, machines run smoothly and tools run cooler.



CAMWorks Modules for Turn Machining

The following CAMWorks modules are associated with Turn Machining:

1. Turning

CAMWorks Modules for Mill-Turn Machining

The following CAMWorks modules are associated with Mill-Turn Machining:

1. Mill/Turn
2. **Rotary Mill:** This CAMWorks module is required for insertion of Wrapped Features.

CAMWorks Modules for Multiaxis Mill Machining

The following CAMWorks modules are associated with Multi Axis Mill Machining:

1. 4X Mill
2. 5X Mill
3. Rotary Mill

CAMWorks Modules for Advanced Turn / Mill-Turn Machining

The following CAMWorks modules are associated with advanced Turn and Mill-Turn Machining:

'Sub Spindle' module

The *Sub Spindle* module enables the functionality that allows addition of non-cutting operations in CAMWorks. These non-cutting operations are used to transfer the stock/part between main and sub spindle on a Turn or Mill-Turn machine having Twin Spindle setup.

'Multi Function' module

The *Multi Function* module enables the *CAMWorks Sync Manager* functionality. For Turn and Mill-Turn machines with Twin Spindle Setups, the *CAMWorks Sync Manager* enables synchronization of operations machined by the tools in the front and rear turrets.

CAMWorks Modules for Wire EDM Machining

The CAMWorks module 'Wire EDM' is associated with Wire EDM Machining.



CAMWorks Module for Posting

If you purchase any one or more of the above mentioned CAMWorks modules, then your CAMWorks license will also be embedded with a module for Posting. This module is not listed in the [Authorized modules tab of the CAMWorks License Manager](#). It is usually listed at the bottom of the [CAMWorks License Info dialog box](#).

- If your CAMWorks license is active, then the *Posting* module listed in the *CAMWorks License Info dialog box* will be checked and disabled.
- If your CAMWorks license is has expired or has become inactive due to some reason, then CAMWorks will run in [Demonstration mode](#). When in *Demonstration mode*, the *Posting* module listed in *the CAMWorks License Info dialog box* will be unchecked and disabled.

CAMWorks Modules for Machine Simulation

The *CAMWorks Virtual Machine* introduced with **CAMWorks 2014 SP 0.1** is a Machine Simulation application. This application is available in three different editions viz. Standard, Professional and Premium. Following are the CAMWorks modules associated with *CAMWorks Virtual Machine*:

Machine Simulator – Standard

Enables the *CAMWorks Virtual Machine - Standard* application. The *Standard* edition supports limited features. When this CAMWorks module is enabled, the *CAMWorks Virtual Machine* application can only be launched from within the *CAMWorks* application. The application will simulate the toolpath records and not the G-code.

Machine Simulator – Professional

Enables the *CAMWorks Virtual Machine - Professional* application. When this CAMWorks module is enabled, the *CAMWorks Virtual Machine* application can only be launched from within the *CAMWorks* application. The application will simulate the generated G-code.

Machine Simulator – Premium

Enables the *CAMWorks Virtual Machine - Premium* application. The *Premium* edition supports all the features of *CAMWorks Virtual Machine*. When this CAMWorks module is enabled, the *CAMWorks Virtual Machine* application can only be launched either from within the *CAMWorks* application or as a standalone application. The application will simulate the generated G-code. It can also be used assemble, create and modify machines.



CAMWorks Modules for Supplementary (Optional) Programs

Listed below are the CAMWorks modules required to run the Optional Programs which function in supplementary capacity to CAMWorks:

1. **Feed/Speeds:** This is the CAMWorks module required to use the [CAMWorks Feed and Speed Library](#).
2. **CW Utilities:** This is the CAMWorks module required to use CAMWorks Utilities.
3. **PR Editor:** This is the CAMWorks module required to run the [Predator CNC Editor 2008](#) program.
4. **ElectroWorks:** This is the CAMWorks module required to run the [ElectroWorks](#) program.
5. **Nesting:** This is the CAMWorks module required to run the [CAMWorks Nesting](#) program.

CAMWorks Modules for CAMWorks Solids

CAMWorks runs as an Add-In within the *SolidWorks* environment. However, in case you do not have the *SolidWorks* application installed, you can purchase the solid modeler named *CAMWorks Solids* through your CAMWorks Reseller. (CAMWorks Solids is an alternative Solid Modeler to SolidWorks and is provided by Geometric Americas, Inc.) Your Reseller will program your CAMWorks license to run *CAMWorks Solids* application as well as the various CAMWorks modules. Listed below are the different CAMWorks modules available for running the *CAMWorks Solids* application.

CWSolids – P

CAMWorks Solids enabled using this module allows creation of **P**art documents (.sldprt) documents only.

CWSolids – PA

CAMWorks Solids enabled using this module allows creation of **P**art documents (.sldprt) as well as **A**ssembly documents (.sldasm).

CWSolids – PAD

CAMWorks Solids enabled using this module allows creation of **P**art documents (.sldprt), **A**ssembly documents (.sldasm) and **D**rawing documents (.slddrw).



Selectively Activating CAMWorks Modules

The need to selectively activate CAMWorks Modules

For a standalone (node-locked) license, the licenses you purchased for various CAMWorks modules will remain active at all times. The need to selectively activate CAMWorks modules does not arise.

For a floating network license, multiple licenses of various CAMWorks modules are present. On occasions when the number of users exceeds the number of licenses available, you may need to release a CAMWorks module which is currently active on your machine to another client on the floating network. For example, a situation where there are 5 clients and only 4 licenses of a CAMWorks module available. In such cases, the need to selectively activate CAMWorks modules arises.

Selectively activating CAMWorks Modules on a Floating Network

On a floating license network, the licenses for CAMWorks modules can be selectively activated or released back to the floating network on the client computers. This is done by using the *CAMWorks License Info* dialog box.

The *CAMWorks License Info* dialog box is opened by clicking on the **Help** menu of SolidWorks/CAMWorks Solids menu bar and selecting **CAMWorks 2014>>License Info...** from the dropdown menu.

To activate a CAMWorks Module

Within the *CAMWorks License Info* dialog box, place a check in the box to the left of the CAMWorks module name in the **Module** column and click the **OK** button. Note that you can check the box only if a license for that module is available else the Module name will be grayed out. Observe that when you select a CAMWorks module, the number in the **Available** column for that particular module reduces by 1.

To automatically activate CAMWorks Modules when CAMWorks is launched

To activate the desired CAMWorks modules whenever you launch CAMWorks, place a check in the box in the **Start Up** column corresponding to the desired CAMWorks module and then click the **OK** button. Use the **Select All** button to select all the listed modules for Start Up and the **Unselect All** button to unselect modules that were selected in the *Start Up* column. The settings in the *CAMWorks License Info* dialog box will be applied whenever you launch CAMWorks.



When CAMWorks is launched, if the licenses for one or more of the modules selected for *Start Up* are not available, then CAMWorks displays the message: ***One or more floating licenses that were requested are not available.***

To release a CAMWorks Module back to the Floating Network

Remove the check in the box to the left of the CAMWorks module name in the **Module** column and click the **OK** button. Observe that when you uncheck a CAMWorks module, the number in the **Available** column for that particular module increases by 1.

The CAMWorks modules are also returned back to the floating network whenever you close the CAMWorks application. Note that, however, a [borrowed license](#) will not be returned to the network. A [borrowed license can be returned](#) before its due date only by using the *CAMWorks License Manager* utility.



A check in this box indicates that the particular module will be selected for use when the current user launches CAMWorks.

A checked module indicates that this module is being used by the current user.

This number indicates the number of licenses available for the particular module on a floating network

Place a check next to a listed module in order to use it. On checking, the number in the Available column reduces by 1 and vice versa.

If the module is unchecked and the Available column indicates '0', then no licenses are currently available since all of them are in use.

The screenshot shows the 'CAMWorks License Info' dialog box. It contains the following information:

- License information:
 - License version date : 20140201 (01-Feb-2014)
 - Support (USP) expiry date : 20140901 (01-Sep-2014)
 - License method : FlexLM Software License
 - License type : Commercial
- Licensed modules table:

Available	Module	Start Up
9	<input checked="" type="checkbox"/> 2.5X Mill Limited	<input checked="" type="checkbox"/>
9	<input checked="" type="checkbox"/> 2.5X Mill	<input checked="" type="checkbox"/>
10	<input checked="" type="checkbox"/> 2.5X Mill plus	<input checked="" type="checkbox"/>
9	<input checked="" type="checkbox"/> 3X Mill L1	<input checked="" type="checkbox"/>
9	<input checked="" type="checkbox"/> 3X Mill L2	<input checked="" type="checkbox"/>
10	<input checked="" type="checkbox"/> Turning	<input checked="" type="checkbox"/>
10	<input checked="" type="checkbox"/> Rotary milling	<input checked="" type="checkbox"/>
11	<input checked="" type="checkbox"/> Multi Function	<input checked="" type="checkbox"/>
12	<input checked="" type="checkbox"/> SubSpindle	<input checked="" type="checkbox"/>
11	<input checked="" type="checkbox"/> Mill/Turn	<input checked="" type="checkbox"/>
10	<input checked="" type="checkbox"/> CW Utilities	<input type="checkbox"/>
11	<input checked="" type="checkbox"/> Wire EDM	<input type="checkbox"/>
11	<input checked="" type="checkbox"/> 3X Undercut	<input checked="" type="checkbox"/>
11	<input checked="" type="checkbox"/> 4X Mill	<input checked="" type="checkbox"/>
11	<input checked="" type="checkbox"/> 5X Mill	<input checked="" type="checkbox"/>
11	<input type="checkbox"/> Machine Simulation - Premium	<input checked="" type="checkbox"/>
11	<input checked="" type="checkbox"/> VoluMill 2.5X	<input checked="" type="checkbox"/>
11	<input checked="" type="checkbox"/> VoluMill 3X	<input checked="" type="checkbox"/>
1	<input checked="" type="checkbox"/> Posting	<input checked="" type="checkbox"/>
0	<input type="checkbox"/> Estimating	<input checked="" type="checkbox"/>

Buttons at the bottom: Select All, Unselect All, Update Licenses, OK, Help.

CAMWorks Modules listed in CAMWorks License Info dialog box



Maximum Permissible Concurrent Users on a Floating Network

On a floating network, the total number of concurrent users (clients simultaneously accessing the floating license) cannot exceed the number of CAMWorks licenses purchased. The number of CAMWorks Licenses currently available on a floating network is indicated in the *Count* field in the second row of the [Authorized Modules tab](#). The *CAMWorks License Manager* allows only as many concurrent users as the number of CAMWorks licenses purchased. The modules can be accessed by the clients on a first-come, first-serve basis.

The maximum number of clients allowed by the CAMWorks License Manager to simultaneously access the floating network is equal to the total number of CAMWorks licenses purchased for the floating network.

Illustration to explain the concept of maximum permissible clients

Consider that 10 licenses have been purchased for a floating network. The CAMWorks license file has been programmed to support 10 licenses of the 2.5 Axis Mill module, 10 licenses of the 3 Axis module, 5 licenses of the Turn module and 2 Licenses of the Mill-Turn module.

→ **Scenario 1:** When no client is accessing any of the modules.

The *Count* field in the second row of the *Authorized Modules* tab will display '10' indicating that all the licenses are available for use. Similarly, the Count for the 2.5 Axis Mill, 3 Axis Mill, Turn and Mill-Turn will display 10, 10, 5 and 2 respectively.

→ **Scenario 2:** Seven clients want to use the 2.5 Axis Mill and 3 Axis Mill modules. Two clients want to use the Turn module.

This will result in a total of 9 clients (7 +2) clients accessing the Floating network. As the floating network supports 10 clients, all the clients will be able to access the modules of their choice.

The *Count* field in the second row of the *Authorized Modules* tab will display '1'. ($10 - 9 = 1$)

The Count for the 2.5 Axis Mill and 3 Axis Mill will display '3'. ($10 - 7 = 3$)

The Count for the Turn module will display '3'. ($5 - 2 = 3$)

→ **Scenario 3:** Eight clients are already accessing the 2.5 Axis Mill and 3 Axis Mill modules. Two clients want to access the Turn module. 1 client want to access the Mill-Turn module.



Eight clients are already accessing a network that supports 10 clients. When an additional 2 clients access the network for the Turn module on a first come first serve basis, the *Count* increases to 10 clients. When 1 more client tries to access the Mill-Turn module, it will not be able to access the network although licenses for the Mill-Turn module are available. This is because the 10 clients are already simultaneously accessing the network.

The *Count* field in the second row of the *Authorized Modules* tab will display '0' since the maximum permissible 10 clients are accessing the network. ($10 - 10 = 0$)

The Count for the 2.5 Axis Mill and 3 Axis Mill will display '2'. ($10 - 8 = 2$)

The Count for the Turn module will display '3'. ($5 - 2 = 3$)

The Count for the Mill-Turn module will display '2'. ($2 - 0 = 2$)

- **Scenario 4:** Five clients are currently using the 2.5 Axis Mill module and five clients are currently using the Turn module. Two clients using the 2.5 Axis module exit the floating network. One new client wants to access the network to use the Turn module and another new client wants to use the Mill-Turn module.

Five clients using the 2.5 Axis Mill module and five clients using the Turn module takes the total number of clients accessing the network to 10. As the network supports a maximum of 10 clients, no more clients can access the network unless some of the current clients exit the network. When two clients using the 2.5 Axis Mill module exit the floating network, the number of concurrent clients accessing the floating network comes down 8. When a new client tries to access the network to use the Turn module, it will unable to do so despite the scope for two more clients to join the network. This is because all the 5 available licenses for Turn module are in use. When another client tries to join the network to use the Mill-Turn module, it will be successful in doing so because 2 licenses for this module are available and the floating network too has two licenses free thereby allowing two more clients to join the network.

The *Count* field in the second row of the *Authorized Modules* tab will display '1' since 9 clients are accessing the network. ($10 - 10 + 2 - 1 = 1$)

The Count for the 2.5 Axis Mill will display '7'. ($10 - 5 + 2 = 7$)

The Count for the Turn module will display '0'. ($5 - 5 = 0$)

The Count for the Mill-Turn module will display '1'. ($2 - 1 = 1$)



APPENDIX C: COMPATIBILITY BETWEEN DIFFERENT LICENSE MODES

License Modes and Compatibility

When you purchase a CAMWorks license, the mode in which it is intended to run is also embedded into the license. CAMWorks is currently supplied in Commercial, Educational and Instructor mode licenses.

We recommend that you read the section [CAMWorks License Modes](#) of this manual in order to gain an understanding of the different CAMWorks License modes.

When you generate CAMWorks data for a solid part/assembly and proceed to save the file, CAMWorks also records the License mode in which CAMWorks data is being saved. A file saved in a particular license mode will always open in that license mode. However, when a file saved using a particular license mode is opened in another license mode, the CAMWorks data may or may not be restored depending on License mode compatibility.

Topics covered:

This section explains the compatibility between the various license modes and what to expect when you save CAMWorks data generated using a particular license mode in another license mode.

- [Compatibility of Commercial mode with other license modes](#)
 - [Opening Commercial mode file in Instructor or Educational License mode](#)
 - [Saving Commercial mode file in Instructor or Educational License mode](#)
- [Compatibility of Instructor mode with other license modes](#)
 - [Opening and Saving Instructor mode file in Commercial License mode](#)
 - [Opening and Saving Instructor mode file in Educational License mode](#)
- [Compatibility of Educational mode with other license modes](#)
 - [Opening and Saving Educational Mode file in Commercial License mode](#)
 - [Opening and Saving Educational mode file in Instructor License mode](#)
- [Saving CAMWorks data in Instructor or Educational License Mode](#)



Compatibility of Commercial mode with other license modes

The below section explains the compatibility of files saved in Commercial license mode with non-commercial license modes:

Opening Commercial mode file in Instructor or Educational License mode

CAMWorks data saved in files using the Commercial license mode is fully restored in Instructor and Educational license modes. The restored CAMWorks data can be viewed and edited. In the case of Educational license mode, since the post-processing functionality is disabled, post-processing data which was generated in Commercial license mode cannot be viewed or edited.

Saving Commercial mode file in Instructor or Educational License mode

If a file containing CAMWorks data saved using Commercial license mode is opened in Instructor or Educational license mode, then CAMWorks data is restored in these modes. However, if you to save the file using the "**Save**" option, CAMWorks displays the following error message:

"Attention! CAMWorks data cannot be saved. CAMWorks data saved in Commercial mode cannot be overwritten in non-commercial mode. Please use the 'Save As...' option to save the CAMWorks data in non-commercial mode."

This limitation has been intentionally added to prevent accidental overwriting of files saved in Commercial license mode. To save the CAMWorks data in Instructor license mode, use the "**Save As..**" option.

Note: CAMWorks data originally saved in Commercial license mode is fully restored in non-commercial license modes. However, in order to save the CAMWorks data in the current license mode, use the "Save As.." option since CAMWorks doesn't permit overwriting of CAMWorks data saved in Commercial license mode. Files thus saved will be saved in the current license mode.

Compatibility of Instructor mode with other license modes

The below section explains the compatibility of files saved in Instructor license mode with other license modes.

Opening and Saving Instructor mode file in Commercial License mode

CAMWorks data saved in files using the Instructor license mode cannot be restored in Commercial license mode.



When a file saved in Instructor license mode is opened in Commercial license mode, CAMWorks displays the message:

"CAMWorks NC data saved while in Instructor mode cannot be restored in Commercial License mode."

When the part is opened, the CAMWorks data stored in Instructor license mode will be missing since it was not restored. You will need to regenerate CAMWorks data in Commercial license mode.

Opening and Saving Instructor mode file in Educational License mode

CAMWorks data saved in files using the Instructor license mode is fully restored in Educational license mode. The CAMWorks data can be viewed and edited. However, since post-processing functionality is disabled in Educational license mode, post-processing data which was generated in Instructor license mode cannot be viewed or edited. If you proceed to save the file after editing the CAMWorks data, it will be saved in Educational license mode since this is the active license mode.

Note: CAMWorks data originally saved in Instructor license mode cannot be restored in Commercial license mode. It is fully restored in Educational mode with the exception of post-processing data (Post-processing functionality is disabled in Educational mode).

Compatibility of Educational mode with other license modes

The below section explains the compatibility of files saved in Educational license mode with other license modes.

Opening and Saving Educational Mode file in Commercial License mode

CAMWorks data saved in files using the Educational license mode cannot be restored in Commercial license mode.

When a file saved in Educational license mode is opened in Commercial license mode, CAMWorks displays the message:

"CAMWorks NC data saved while in Educational mode cannot be restored in Commercial License mode."

When the part is opened, the CAMWorks data stored in Educational License mode will be missing since it was not restored. You will need to regenerate CAMWorks data in Commercial license mode.

Opening and Saving Educational mode file in Instructor License mode

CAMWorks data saved in files using the Educational Mode can be fully restored in Instructor license mode. The CAMWorks data can be fully viewed, edited and



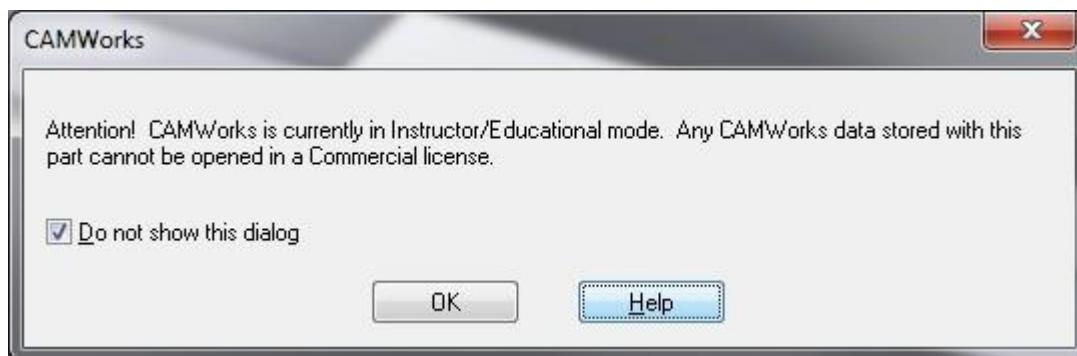
saved. This provision has been enabled so that tutor at an educational institute (who usually has the Instructor license mode) can view the CAMWorks data generated by students (who have Educational license mode). However, if the file is saved after editing the CAMWorks data, it will be saved in Instructor license mode since this is the active license mode.

Note: CAMWorks data originally saved in Educational license mode cannot be restored in Commercial license mode. It is fully restored in Instructor license mode.

Saving CAMWorks data in Instructor or Educational License Mode

When you generate CAMWorks data in Instructor license mode or Educational license mode and try to save the file using the "Save" button, CAMWorks displays the following message:

"Attention! CAMWorks is currently in Instructor/Educational mode. Any CAMWorks data stored with this part cannot be opened in a Commercial license."



The message is displayed to inform you that CAMWorks data saved in files using the Instructor or Educational license mode cannot be restored in Commercial license mode. Click **OK** to close the message and proceed with saving the file. You can select the "**Do not show this dialog**" option to avoid viewing this message every time you save a file in Instructor or Educational license mode.



APPENDIX D: ADDING EDM MACHINES AND MODELS

If your particular EDM machine and/or model are not listed in the Machine Selection dialog box, you can add the machine and model as explained in this section.

EDM Post Files

The following files are used for EDM post processing in CAMWorks:

- Wire EDM post file .pst - a unique file for each make/model (ex: Agie123_A.PST)
- Wire EDM Cutting conditions file (.brcc, .ecc, .sbcc or .sdcc) - a cutting conditions database if supported by the make/model (ex: Agie123_A.ecc).
- Post information files - dependent on the make and model.
- MachineSetup.bin - a binary file that contains the list of makes/models and post-specific information used by CAMWorks. When CAMWorks is installed, this file is installed in the EDM Posts folder (e.g., **\CAMWorksData\CAMWorks201x\EDMPosts**). The file cannot be edited directly and the EDM Machine Setup utility (**CWEdmMachinesSetup.exe**) is provided for editing. The MACHINESETUP.TXT file is used by the EDM Machine Setup Utility to generate the .bin file.

Note: In earlier CAMWorks releases, the MachineSetup.bin file that defines the default list of EDM makes and models was always overwritten. Starting with CAMWorks 2010 SP1.0, this file is no longer overwritten. This change was made so that when you install a newer version of CAMWorks and modify the makes and models, you will not have to remake these changes for each new service pack.

Updating from a Previous Release

If you are updating a previous release of CAMWorks (e.g., CAMWorks 2013), you need to copy the post files used in the previous release to the CAMWorks 2014 post folder (ex: \CAMWorksData\CAMWorks2014\EDM\Posts). Copy the Wire EDM post file (.pst), Wire EDM Cutting conditions file (.brcc, .ecc, .sbcc or .sdcc) if supported, post information files if applicable, the *MachineSetup.bin* and the *MACHINESETUP.TXT* file (you need this file if you run the EDM Machine Setup utility to add machines/models). Overwrite the *MachineSetup.bin* and *MACHINESETUP.TXT* files that are installed with CAMWorks 2013.



Procedure to Add Machines and Models

To add a new machine/model or a custom post from an existing installation:
Exit SolidWorks or CAMWorks Solids.

Follow [steps 7-12](#) below to verify the machines/models are listed and the paths are **correct**.

1. Start **Windows Explorer**.
2. Copy the custom Wire EDM post file (**.pst**) and any additional post information files to the applicable post folder (ex: `\CAMWorksData\CAMWorks2014\EDM\Posts`).
3. If supported by the make/model, copy the custom Wire EDM Cutting conditions file (**.brcc**, **.ecc**, **.sbcc** or **.sdcc**) to the applicable cutting conditions folder.
(ex: `CAMWorksData\CAMWorks2014\EDM\EDMCuttingConditions`).
4. On the Windows Taskbar, select **Start>>Programs>>CAMWorks2014>>EDM Post Utilities>>EDM Machine Setup**.
5. Alternatively, you can open the EDM\Posts folder under the CAMWorks data folder (e.g., `C:\CAMWorksData\CAMWorks2014\EDM\Posts`) and double-click **CWEdmMachinesSetup.exe**.
6. The EDM Machine Setup dialog box displays.
 - If you are adding a new machine, click the **Add Machine** button under the list of Makes. **New_Machine** displays in the list box. Click the **Settings** tab and type the **Make and Model** names that were provided by Geometric Technologies.
 - If you have a machine make/model defined and are adding a new model for the same machine make, select the **Make** from the list of machines and click the **Add model** button under the list of models. **New_Model** displays in the list box. Click the **Settings** tab and type the **Model name** that was provided by Geometric Technologies.

IMPORTANT: The Make and Model names must match the Make and Model names provided by Geometric Americas, Inc.

7. Modify the settings on the Settings tab.

IMPORTANT: The settings on this tab are based on how the post processor was written and must match the information provided by Geometric Americas, Inc.

- In the Post section:
 - Select the type of code you need to output (G code or Command/Iso)



- Click the **Select** button and select the **Post processor** that goes with this machine
 - In the Cutting Conditions database section: Click the **Select** button and select the applicable cutting conditions database if supported by the make/model.
 - In the Parameters section: Adjust the settings to correspond to the post processor.
 - Click the **Save** button, then click **Exit**.
8. Start **CAMWorks**.
 9. Double click the **Machine** item in the Feature tree, select the **Wire EDM** machine on the **Machine** tab and click **OK**.
 10. Right-click the **Wire EDM** Machine in the tree and click **Select Machine**.
 11. In the Machine Selection dialog box, select the applicable **Machine and Model** and click **OK**.
 12. Check the paths on the **EDM Setup** and **Posting** tabs to make sure the correct cutting conditions database and post processor files are selected.
 13. Click **OK**.



TROUBLESHOOTING SECTION



TROUBLESHOOTING A: BASICS

Topics covered

- [Basic Troubleshooting](#)
 - [My system slows down considerably or hangs up when I open CAMWorks for use](#)
 - [Where to download the latest CAMWorks updates and installers](#)
- [CAMWorks Startup Problems](#)
 - [Tree and forms are blank in TechDB](#)
 - [Camworks.dll cannot be loaded](#)
 - [CAMWorks tab does not display on Command Manager](#)
- [General Operation Problems](#)
 - [Machining Data Is Not Restored](#)
 - [Post Process Command is not on the Shortcut Menu](#)
- [What to do if the Troubleshooting Manual doesn't solve your problem](#)

Basic Troubleshooting

Doing some basic troubleshooting can save you time. Before you call for assistance, there are a number of areas you can check. The following list is designed to help you discover common problems or direct you toward problem areas that may have been overlooked. In some cases, your problem may be caused by something as simple as a loose cable.

- **Make sure your hardware and peripherals are set up correctly and you have the most recent critical operating system updates and driver updates.**

If Windows, the mouse, printer or video card is not operating correctly, you need to troubleshoot Windows or the peripheral equipment, not CAMWorks.

- **Check all cable connections.**

A loose cable may cause your problem.

- **Consult your manuals and online help**

Read the manuals and the online help for your equipment and verify that you have followed all the instructions.



My system slows down considerably or hangs up when I open CAMWorks for use

Make sure your hardware and software meet the minimum [system requirements](#).

Windows requires a considerable amount of computing power, memory and disk space. When you try to run Windows applications such as SolidWorks/CAMWorks Solids and CAMWorks, you may find your computer is unable to handle the demand.

Where to download the latest CAMWorks updates and installers from

Access the Geometric Americas, Inc. Website

The Geometric Technologies website, <http://www.CAMWorks.com>, is designed to provide information for both new and current customers including:

- Information about new releases
- Hints and tips for getting the most out of your CAMWorks system
- Information about special software offers
- CAMWorks downloads (service packs, supplemental programs, utilities, etc.)

Contact your CAMWorks Reseller to avail the permissions required to access this website.

CAMWorks Startup Problems

This section describes some possible startup complications and provides suggestions for you to resolve the problems.

Tree and forms are blank in TechDB

A shared resource (sccrun.dll) that is required by many applications may be corrupted or has been unregistered.

To correct this problem: Click **Start** on the Windows taskbar, then select **Run**. In the Run dialog box, type **regsvr32 sccrun.dll** and click **OK**.

Camworks.dll cannot be loaded

If you start SolidWorks and a message displays indicating that the camworks.dll cannot be loaded, CAMWorks may be trying to open two versions: the previous version and CAMWorks 2014.

To correct the problem:

1. Close all part models.
2. Select **Add-Ins** on the SolidWorks/ CAMWorks Solids Tools menu.



3. In the Add-Ins dialog box, remove the check mark from the previous versions of CAMWorks, then click **OK**.
4. Close **SolidWorks/ CAMWorks Solids**.
5. Restart **SolidWorks/ CAMWorks Solids**.
6. Select **Add-Ins** again and check **CAMWorks 2014**, then click **OK**. CAMWorks 2014 will be launched within the SolidWorks/ CAMWorks Solids environment.
7. Open a part model.

CAMWorks tab does not display on Command Manager

After installing CAMWorks on some computers, the CAMWorks tab may not display on the CommandManager. To display the CAMWorks tab:

1. Right click on an existing **CommandManager** tab and select **Customize CommandManager**. The Customize dialog box opens.
2. Right click the tab on the right side of the CommandManager, select **Add Tab**, then click **CAMWorks**.
3. Click **OK** to close the Customize dialog box.

General Operation Problems

This section describes some common complications and provides suggestions for you to resolve the problems.

Machining Data Is Not Restored

If you open a SolidWorks part file or assembly and the machining data (machinable features, operations and toolpaths) that you thought you had saved previously is missing:

- If the Save/Restore part option or Save/Restore assembly option on the General tab in the Options dialog box was checked when the part or assembly was saved and you open the part or assembly when the applicable option is unchecked, a message indicates Save/Restore is disabled and you can choose to restore the part model or assembly with or without the CAMWorks data.
- You may have saved the part when CAMWorks was running in [demonstration mode](#). Files saved in demonstration mode can be opened in a licensed version; however, the machining data will not be restored.
- You may have saved the part in a newer version of CAMWorks and are opening the part document in an older version.



Post Process Command is not on the Shortcut Menu

If you are ready to generate the NC program and the Post Process command is not displayed on the shortcut menus, make sure you have selected a post processor and generated the toolpaths. To select a post processor: double click **Machine** in the tree and then click the **Post Processor** tab in the Machine dialog box.

What to do if the Troubleshooting Manual doesn't solve your problem

Contact Your CAMWorks Reseller

Troubleshooting section in the manual provides solutions to common problems. If you are unable to find a solution to your problem using the available information, and you are reasonably certain the problem is in CAMWorks, you can get assistance by contacting your CAMWorks Reseller.

Products from Geometric Americas, Inc. are sold and distributed by a network of dealers and distributors who are trained by Geometric Americas, Inc. to provide technical support. These CAMWorks Resellers have in-house professional support staff who have a thorough knowledge of the product and provide friendly and timely support.

Please be able to provide as much of the following information as you can. This information will be used to analyze your problem:

- Product name, version, and build number.
- Customer I.D. # and Dongle # (if using hardware license/security)
- Windows version including Service Pack (e.g., Windows XP SP3)
- Description of hardware (CPU, RAM, Video adapter)
- Additional Windows applications in your system (e.g., Microsoft Office 2007)
- Exact error message, if any
- Steps to re-create the problem
- Sample part model to demonstrate the problem



TROUBLESHOOTING B: LICENSE ACTIVATION

As a result of the complexity of the PC operating environment, conflicts and problems can occur.

This chapter provides suggestions for you to resolve problems with the following:

- [Valid License is not detected when CAMWorks is launched](#)
- [CAMWorks License does not support the CAMWorks Version](#)
- [FlexLM Software License Problems for Standalone Installation](#)
- [Floating Network License Problems](#)
- [Hardware Dongle License Problems](#)
- [Troubleshooting Communication between the Computer and the Dongle](#)

Valid License is not detected when CAMWorks is launched

When CAMWorks is launched within the CAD application, it automatically checks for the presence of a valid license. If a valid license is detected, then CAMWorks is launched. If a valid license is not detected, then CAMWorks displays a Warning Message dialog box. This dialog box contains a message stating the reason why a valid license could not be detected by CAMWorks on the system.

Following are the different warning messages displayed in the Warning Message dialog box on non-detection of valid license along with the corresponding reason for non-detection of the license:

Sr. no.	Warning Messages displayed in the dialog box	Reason why the Error Message is displayed
1.	CAMWorks could not find a valid license and will start in Demonstration mode. While in Demonstration mode, you will not be able to post process and CAMWorks data saved in this file will not be restored in a Commercial licensed product.	When the License File is not set correctly in the License Setup tab of the CAMWorks License Manager for a Standalone or Floating CAMWorks License . OR When the License File set in the License Setup tab of the CAMWorks License Manager for a Standalone or Floating CAMWorks License is invalid.
2.	Unable to connect to license server.	When the Server running CAMWorks

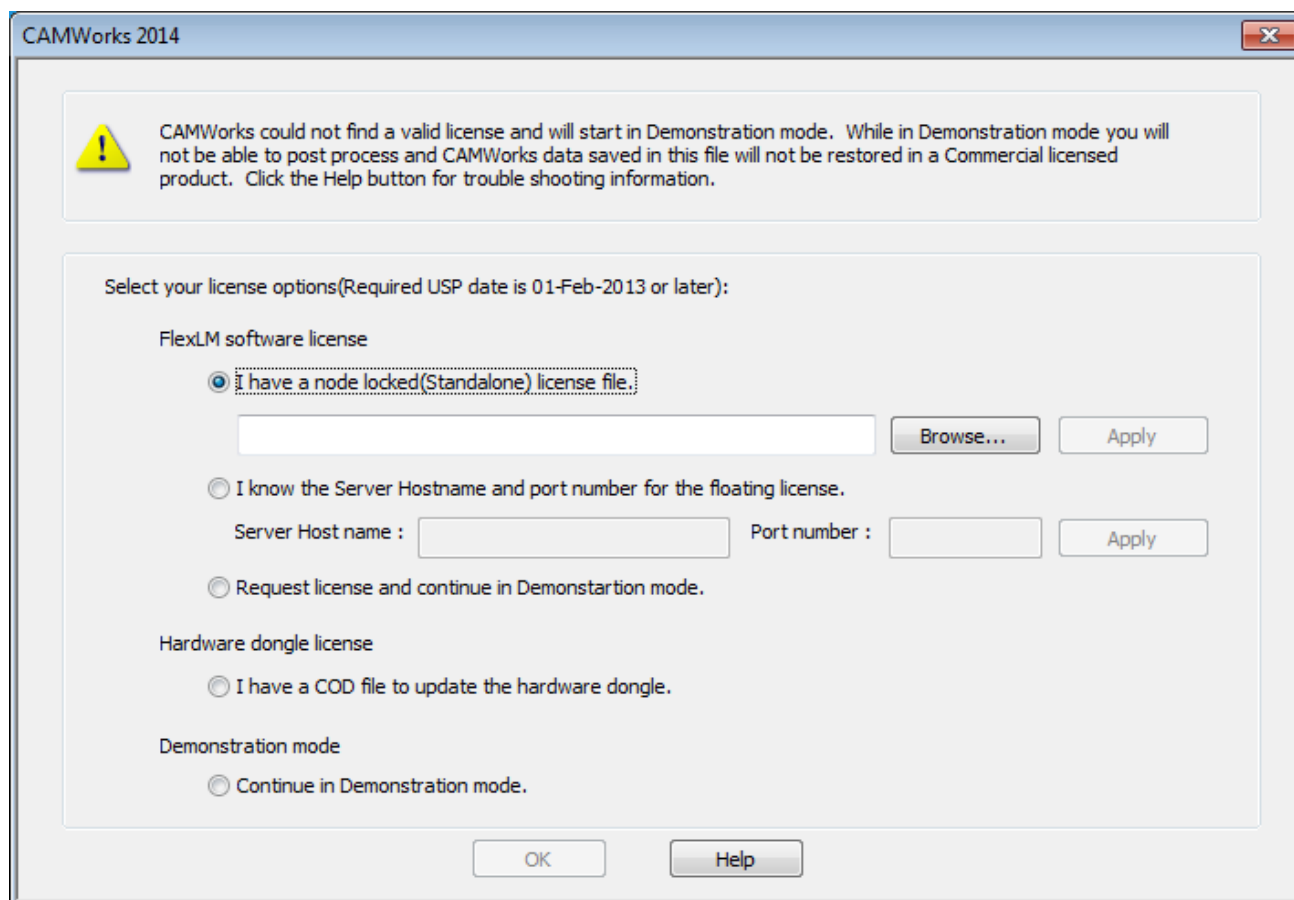


Sr. no.	Warning Messages displayed in the dialog box	Reason why the Error Message is displayed
	Please check service status and checkout the corresponding licenses.	License Service is unavailable for a Floating Network License.
3.	CAMWorks security failed! All licenses are in use.	When all the available licenses on a floating network are currently is use for a Floating Network License .
4.	Not able to detect the hardware key. Please make sure that the hardware key is connected and the drivers are updated.	When CAMWorks cannot detect the Hardware Dongle connected to the computer port for a CAMWorks License using Hardware Dongle licensing method .
5.	CAMWorks could not find a valid .COD file for the Hardware Dongle license and will start in Demonstration mode. While in Demonstration mode you will not be able to post process and CAMWorks data saved in this file will not be restored in a Commercial licensed product.	When the .COD file is either not activated or has expired for a CAMWorks License using Hardware Dongle Licensing method .
6.	FlexLM License has expired. Please request a new license. CAMWorks will run in Demonstration mode till a new valid license is activated. While in Demonstration mode you will not be able to post process and CAMWorks data saved in this file will not be restored in a Commercial licensed product.	When the License File used for FlexLM licensing method expires for a Standalone or Floating CAMWorks License .

In addition to stating the reason why a valid license could not be detected, the Warning Message dialog box further states that CAMWorks will run in Demonstration mode in the absence of a valid license. It also informs that files saved in Demonstration mode cannot be later opened in any other mode.

Depending on the reason for non-detection of a valid license, one of the following license options displayed in the dialog box will be selected by default:

- I have a node locked (Standalone) license file
- I know the Server Host name and port number for the floating license
- Request license and continue in Demonstration mode
- I have a COD file to update the hardware dongle
- Continue in Demonstration mode



Dialog box displayed when valid CAMWorks license is not detected

You can either use the default option or change to another option in order to proceed using the CAMWorks application.

If you need assistance on the instructions to be followed after you select a particular option, click on the **Help** button of the Warning Message dialog box. The consequent Help article displayed gives details on the various options and the instructions on how to activate the license based on the option chosen.

CAMWorks License does not support the CAMWorks Version

In order to update an existing CAMWorks installation, you must currently be enrolled in a CAMWorks [Update Support Plan](#) and your software license must be programmed to run this release.

If your Update Support Plan is active, then you can install those *CAMWorks* versions/Service Packs which have a [License Version date](#) prior to or the same as the [expiry date of your Update Support Plan](#).

If your Update Support Plan has expired, you won't be eligible to upgrade your existing CAMWorks version. You will need to contact your CAMWorks Reseller



to re-activate your Update Support Plan. Once you re-enroll for the Update Support Plan, you need to [update your CAMWorks License](#) by activating the fresh CAMWorks license that you receive. Once your Update Support Plan is active, you can upgrade your CAMWorks installation.

FlexLM Software License Problems for Standalone Installation

Given below are some causes and possible solutions for a CAMWorks [Standalone installation](#) using [FlexLM Software Licensing Method](#).

- **CAMWorks License Manager is not installed.**

CAMWorks will not function at all in the absence of the CAMWorks License Manager utility. Read the section "[Installing CAMWorks License Manager by downloading Installer](#)" for instructions on how to install the CAMWorks License Manager utility.
- **The location identifying the software license file is not correct.**

Make sure the specified location is correct on the License Setup in the CAMWorks License Manager.

 - If installed as a Standalone license, the license file must be on the same PC that is running CAMWorks.
 - If installed as a floating network license, the license file must be on the Server PC that is running the CAMWorks License Service.
- **The license file may be invalid.**

If the license file has been modified, the license may be invalid.
- **The CAMWorks License Manager has been uninstalled.**

If the CAMWorks License Manager is uninstalled, the license is also removed and CAMWorks will no longer run on that machine until a new license has been applied for and activated. Contact your CAMWorks Reseller.
- **You may be using a dongle for licensing instead of software licensing.**

If you are using a dongle, check the License method on the License Setup tab in the CAMWorks License Manager and make sure Hardware dongle is selected.
- **CAMWorks starts without the error message; however, the functions are disabled.**

You may not have a license for the particular CAMWorks module that you are trying to use. You can verify the [CAMWorks modules](#) you are licensed to run by viewing the CAMWorks License Info dialog box. To view this dialog box, click on the Help menu in SolidWorks/ CAMWorks Solids and select **CAMWorks 2014>>License Info ...** The *CAMWorks License Info* dialog box will



be displayed. This dialog box lists all the CAMWorks Modules you are licensed to run.

Floating Network License Problems

Given below are some causes and possible solutions for a CAMWorks [Floating Network License](#).

NOTE: McAfee products running on the server and/or client can conflict with the floating license. In some cases, disabling all McAfee products will resolve the conflict. If this does not work, we recommend uninstalling the McAfee products.

- **Cannot activate license on Client**

When the Authorized Modules tab is blank and the Authorization Status on the Status tab indicates Failed:

- The Server Host name may be incorrect in the CAMWorks License Manager on the client PC.

Start the CAMWorks License Manager on the client PC and verify that the Server Host name is correct on the License Setup tab.

- The firewall on the Server PC may not be allowing the client to access the CAMWorks License Service.

Configure the firewall to allow the clients.

- The CAMWorks License Service may not be running on the Server PC.

Verify the License Service is running. The License Service must be running continuously in order for the clients to run CAMWorks.

- **CAMWorks functions are disabled on client**

- The module you are trying to use may not be assigned to the client or all licenses for that module may be in use by other clients.

Launch CAMWorks as an Add-In in CAMWorks. Click the **Help** menu of SolidWorks/CAMWorks Solids and then select **CAMWorks 201x Help>>License Info**. The **CAMWorks License Info** dialog box will be displayed. Check the licensed [CAMWorks modules](#) within this dialog box. If the module you want to use has an available license, check the box next to the module name. If no licenses are available and another client releases one, click the **Refresh Licenses** button to update the list so you can select it.



- **Install CAMWorks license service button not activated**

- The license file and/or log file path may not be specified on the Server Settings tab.
A license file and a log file path are required to install the license service.

- **Unable to specify path to replace current floating license file**

- The current floating license has not been removed completely.
Follow the directions to remove the CAMWorks License Service and the current license, then select the new license file and reinstall the License Service.

- **Cannot activate license on client**

MAC addresses are identifiers assigned to most network adapters or network interface cards by the manufacturer for identification. To ensure that server license remains active it is recommended that:

- The server computer should contain only one MAC address and it must remain static.
- The server computer should not be moved or reconnected to the network using a different method, e.g. wireless to hardwired, after the license has been issued and is running.

- **Only a few clients are able to access CAMWorks modules on a floating network**

On a floating network, the maximum number of clients allowed to simultaneously access the floating network is equal to the total number of CAMWorks licenses purchased. Read the section: [Maximum Permissible Concurrent Users on a Floating Network](#) to understand this concept.

- **Check hard drive format type**

For Windows Vista (Ultimate and Enterprise editions), you cannot install the CAMWorks License Manager on a hard drive that has been formatted as a dynamic disk. The hard drive must be formatted as a basic disk.

Check your hard drive:

1. From your desktop, select **Start>>Control Panel**. Then select **Administrative Tools** and **Computer Management**.
2. In the Computer Management dialog box, double-click the **Disk Management** folder in the tree on the left.



3. On the right side of the dialog box, locate the **Volume** where the License Manager is installed and make sure the Type is **Basic**.
4. If the Type is Dynamic, uninstall the License Manager and re-install the software on a basic drive.

Hardware Dongle License Problems

Listed below are some suggestions for troubleshooting if you are using a Hardware dongle instead of the FlexLM Software license. After trying each suggestion, start CAMWorks and see if the problem has been corrected.

- **Verify the dongle is installed correctly.**

The first step in troubleshooting this problem is to make sure the dongle is connected to the computer, then start SolidWorks/CAMWorks.

- If you have a USB key, plug the key into the USB connector on the PC. If all the USB connectors are being used, you can purchase a USB hub to add additional connectors.

- **Check the CAMWorks License Manager for an incorrect option setting.**

If you have installed the CAMWorks License Manager, the License method on the License Setup tab may be set incorrectly to FlexLM Software. Start the CAMWorks License Manager and make sure the License method is set to Hardware dongle.

- **Check the communication between computer and dongle.**

If a valid license is not detected after you try the first two suggestions, run the Key Manager utility.

1. Click Start on the Windows Task bar and select **Programs>>CAMWorks License Manager>>Key Manager**.
2. The **Update Hardware License 2014 Ver 1.0** dialog box is displayed.
3. Select **Update** on the menu bar, then select **View** within this menu.
 - If the PC is communicating with the dongle, the Key Information dialog box will display the current license.
 - If the dongle is not communicating, then an error message will be displayed indicating the security block is not detected. Use the information below to continue troubleshooting.



Troubleshooting Communication between the Computer and the Dongle

Listed below are some causes and possible solutions when the computer is unable to communicate with the dongle. After trying each suggestion, run the CAMWorks License Manager program as explained above.

- **The Sentinel driver is not installed or is corrupt.**

Make sure the Sentinel driver is installed. To check for installation, look for the Sentinel System Driver in the **Control Panel**>>**Add/Remove Programs** list.

- If it is not listed, you need to install the **Hardware Dongle License Driver** (Sentinel 7.6.6) from the [CAMWorks website](#).
- If it is listed, use the **Add/Remove Programs** function to uninstall the Sentinel System Driver, reboot, then reinstall the driver. Note that when using a USB key, the dongle should not be connected when you install the driver.

- **The dongle may have failed.**

Dongles occasionally fail. You can check the dongle if you have multiple computers. Connect the dongle to another computer. You do not need to have CAMWorks installed on this PC. Install the Sentinel Driver from the [CAMWorks website](#). Then, run the CAMWorks License Manager program as explained above.

Dongles are very sensitive and have been known to fail if used with certain PC hardware. Some multifunction boards that contain disk controllers, serial, parallel and game ports have been known to burn out the dongle. If you think this has occurred in your system, contact your CAMWorks Reseller.

If you are a licensed user, you can return the dongle to your CAMWorks Reseller for a replacement.



TROUBLESHOOTING C: BORROWING LICENSES ON FLOATING NETWORK

Before you read this section for troubleshooting issues related to borrowing licenses on a floating network, we recommend that you read the section '[Borrowing a Floating License on a Client computer](#)' from this manual in order to gain an understanding of how to borrow a floating license.

In certain cases, trying to borrow a floating license or accessing the borrowed license might fail. An error message indicating the reason for failure will then be displayed in the Authorized Modules tab either in the Remarks field or in the License Borrowing group box.

Given below is a list of possible scenarios in which trying to borrow a floating license or accessing the borrowed license will fail:

- The first column indicates the scenario in which the client tries to either borrow the floating license.
- The second column indicates the error message which will be displayed on failure to borrow the license.
- The third column explains the reason of failure to borrow the license.

Scenario	Error Message	Reason for Failure
Client tries to borrow a floating license for a particular CAMWorks module for more than 7 days but License is not borrowed.	The Remarks field in the Authorized Modules grid will display the message: "You cannot borrow that long. So please select an earlier date and try again."	The license will not be borrowed because CAMWorks allows a floating license to be borrowed for a maximum duration of seven days. License can be borrowed when the duration is reduced to seven days or less than seven days.
A floating license has been borrowed by a client. The client is not connected to the floating network and tries to access CAMWorks but is unable to do so.	The Remarks field in the Authorized Modules grid will display the message: "Borrow period has expired."	The client will not be able to access CAMWorks because the borrowing period has most probably expired. The client must connect to the floating network and once again borrow the license in order to access CAMWorks when not connected to the network.



Scenario	Error Message	Reason for Failure
Client tries to borrow a license but license is not borrowed.	The Remarks field in the Authorized Modules grid displays the message, "All licenses are already borrowed."	All the available licenses on the floating network have already been borrowed. Hence, the license cannot be borrowed unless a borrowed license is returned.
The Server on the floating license network is also setup as a client. This client tries to borrow a license but the License Borrowing group box in the Authorized Modules tab is disabled.	The License Borrowing section displays the message: "License Borrowing is not supported because this computer is also a License Server."	Licenses can be borrowed only by client computers. It is not possible to borrow a license on the Server computer which runs the CAMWorks License Service.
Client tries to borrow a license but the License Borrowing group box in the Authorized Modules tab is disabled.	The License Borrowing group box displays the message: "Server port is not defined. License Borrowing is restricted. Please define a port on License Setup and try again."	In order to borrow a floating license, the Server Port number should be entered in the Port Number field of the License Setup tab of the CAMWorks License Manager dialog box. Once the correct Port number is entered, floating license can be borrowed.



TROUBLESHOOTING D: CAMWORKS SOLIDS

ERROR MESSAGES

Running CAMWorks Solids

CAMWorks Solids is an alternative Solid Modeler to SolidWorks and is provided by Geometric Americas, Inc. The license for CAMWorks Solids is controlled from the CAMWorks License Manager utility.

If a problem is encountered when you try to launch CAMWorks Solids, then a numbered error message will be displayed. The messages will indicate what problem has been encountered when starting CAMWorks Solids.

Given below are the error messages encountered if CAMWorks Solids fails to start along with their possible causes and resolution.

101

When a valid CAMWorks license is not detected by the CAMWorks License Manager, the message **Error 101: CAMWorks security has failed** will be displayed when you try to launch CAMWorks Solids.

Case 1 - CAMWorks Solids security has failed.

- **Causes**

- The software license or dongle (key) may not be installed or the license may have expired.
- Your CAMWorks license may not be programmed to run CAMWorks Solids.
- If you are running a floating license, all CAMWorks Solids licenses may be in use.

- **Resolution**

Depending on the type of license you have, make sure the license software is installed or the dongle is attached correctly.

- Verify that your CAMWorks license supports CAMWorks Solids. On the **Authorized Modules** tab of the CAMWorks License Manager utility, verify that **Yes** is displayed in the Available column for **CWSolids - PA** or **CWSolids - PAD**. If No is displayed, contact your CAMWorks Reseller to obtain a license.
- If you are using CAMWorks Solids on a floating network, verify if a floating license is available. For a floating license, if No is displayed in the



Available column for CWSolids - PA or CWSolids - PAD and the License Count shows 1 or more licenses in the Authorized Modules tab of the CAMWorks License Manager utility, then it indicates that all licenses may be in use by clients.

- If your [Update Support Plan \(USP\)](#) has expired, contact your Reseller.

Case 2 - CAMWorks Solids is configured to run in Part and Assembly mode but the available license is for Part, Assembly and Drawing mode.

Case 3 - CAMWorks Solids is configured to run in Part, Assembly and Drawing mode but the available license is for Part and Assembly mode.

- **Causes**

- Case 2 - You are trying to force CAMWorks Solids to run in Part & Assembly mode, however only a Part, Assembly & Drawing license is available.
- Case 3 - You are trying to force CAMWorks Solids to run in Part, Assembly & Drawing mode, however only a Part & Assembly license is available.

- **Resolution**

You may not have permission to configure and run CAMWorks Solids on your computer.

If you are running Vista or Windows 7, you must be logged in as Administrator with full privileges. In addition, on Vista and Windows 7, you need to click on you need to click on the **Start menu** of the Windows taskbar, locate the **CAMWorks Solids 201x** item, right-click on it and select **Run as Administrator** from the context menu.

102

CAMWorks Solids security failed! Not licensed for this version. The current CAMWorks Solids license (<lic code>) is invalid for this CAMWorks Solids version (<CW app code>).

- **Cause**

Your CAMWorks license does not support the current version of CAMWorks Solids.

- **Resolution**

Your [Update Support Plan](#) (USP) has expired. Contact your CAMWorks Reseller.



103

Unable to start CAMWorks Solids. Program not found at installed location.

- **Cause**

This error is likely caused because the installation did not complete properly.

- **Resolution**

Uninstall CAMWorks Solids and delete the CAMWorks Solids folder. Reboot, login as Administrator and reinstall. If this does not correct the problem, contact your Reseller.

104

Unable to start CAMWorks Solids process.

- **Cause**

This may occur if the computer does not have enough resources to start CAMWorks Solids.

- **Resolution**

Close open applications and restart CAMWorks Solids.

105

You do not have permissions to configure and run CAMWorks Solids. Login as Administrator and restart CAMWorks Solids. If running Vista, restart Solids selecting "**Run as Administrator**" option.

- **Cause**

CAMWorks Solids is attempting to reconfigure to start in the mode specified by the active license, but does not have proper permissions.

- **Resolution**

If you are running Vista or Windows 7, you must be logged in as Administrator with full privileges. In addition, on Vista and Windows 7, you need to click on you need to click on the **Start menu** of the Windows taskbar, locate the **CAMWorks Solids 201x** item, right-click on it and select **Run as Administrator** from the context menu.

106

Your CAMWorks Solids installation is not valid and will not run.



- **Cause**

Registry key *HKEY_LOCAL_MACHINE\SOFTWARE\CAMWorksSolids\Security* is not accessible (either it is not there or user does not have permission to read it). This may be due to an incomplete resolution.

- **Resolution**

If you are running Vista or Windows 7, you must be logged in as Administrator with full privileges. In addition, on Vista or Windows 7, you need to click on you need to click on the **Start menu** of the Windows taskbar, locate the **CAMWorks Solids 201x** item, right-click on it and select **Run as Administrator** from the context menu.

If this fails, uninstall CAMWorks Solids and delete the CAMWorks Solids folder. Reboot, login as Administrator and reinstall. If this does not correct the problem, contact your Reseller.

107

- **Serial Number**

Your CAMWorks Solids installation is not valid and will not run.

- **Cause**

This error is likely caused because the installation did not complete properly.

- **Resolution**

Uninstall CAMWorks Solids and delete the CAMWorks Solids folder. Reboot, login as Administrator and reinstall. If this does not correct the problem, contact your reseller.

108

You do not have permissions to configure and run CAMWorks Solids. Login as Administrator and restart **CAMWorks Solids**. If running Vista, restart Solids selecting "**Run as administrator**."

- **Cause**

CAMWorks Solids is attempting to reconfigure to start in the mode specified by the active license, but does not have proper permissions.

- **Resolution**

If you are running Vista or Windows 7, you must be logged in as Administrator with full privileges. In addition, on Vista or Windows 7 you need to click on **Start>>Programs>>CAMWorks 201x**, then right click **CAMWorks Solids 201x** and select **Run as Administrator**.



109, 110, 111, 112

- **Cause**

These errors occur only in debug mode when the content at ***HKEY_LOCAL_MACHINE\SOFTWARE\CAMWorksSolids\Security*** is not correct.

- **Resolution**

Uninstall CAMWorks Solids and delete the CAMWorks Solids folder. Reboot, login as Administrator and reinstall. If this does not correct the problem, contact your reseller.

113

Unable to detect a CAMWorks Solids license. CAMWorks will close now.

- **Cause**

This error displays only after CAMWorks Solids has started and has been running and indicates that a license was available during startup but is no longer available.

- **Resolution**

If running a hardware dongle, the dongle may have been removed. Verify that it is still connected and working. If running a floating software license, the connection to the server may have been lost, possibly due to a network connection problem. Contact your network administrator.

114

SolidWorks executable not found. Launcher was able to find the location of SolidWorks executable in registry, but sldworks.exe was not found at that location. This could happen because of incomplete installation.

- **Cause**

This error is likely caused because the installation did not complete properly.

- **Resolution**

Uninstall CAMWorks Solids and delete the CAMWorks Solids folder. Reboot, login as Administrator and reinstall. If this does not correct the problem, contact your Reseller.