

# MASTERCAM 2020 ADMINISTRATOR GUIDE

February 2019

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February 2019

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Software: Mastercam 2020

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## Be sure you have the latest information!

Information might have changed or been added since this document was published. The latest version of the document is installed with Mastercam or can be obtained from your local Reseller. A ReadMe file (ReadMe.PDF) – installed with each release – includes the latest information about Mastercam features and enhancements.

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# INTRODUCTION

The *Mastercam 2020 Administrator Guide* covers the installation, updating, and administration of Mastercam's licenses and products. Mastercam is a protected software and requires a license to run.

## Before You Begin

Mastercam 2020 uses one of three license types to run: HASP, NetHASP, or software. HASPs and NetHASPs are hardware licenses, meaning they are licenses stored in a physical USB plug-in device. The software license is digital and is managed by CodeMeter. These licenses are either Retail or Evaluation. Before continuing, be aware of your current license type.

This guide also refers to Mastercam's various folder locations. Mastercam creates folders that are non-modifiable and user-modifiable. The default folder locations and types are listed below.

### Mastercam Installation Locations

#### *Program Files (Non-modifiable)*

C:\Program Files\Mastercam 2020\Mastercam

C:\Program Files\Common Files\Mastercam

#### *Documents (User-modifiable)*

C:\Users\<User name>\Documents\My Mastercam 2020

C:\Users\Public\Documents\Shared Mastercam

## Mastercam Resources

Enhance your Mastercam experience by using the following resources:

- *Mastercam Documentation*—Mastercam installs a number of helpful documents for your version of software in the Documentation folder of your Mastercam 2020 installation.
- *Mastercam Help*—Access Mastercam Help by selecting **Help, Contents** from Mastercam's **File** tab or by pressing **[Alt+H]** on your keyboard.
- *Mastercam Reseller*—Your local Mastercam Reseller can help with most questions about Mastercam.
- *Technical Support*—Our Technical Support department (+1 860-875-5006 or [support@mastercam.com](mailto:support@mastercam.com)) is open Monday through Friday from 8:00 a.m. to 5:30 p.m. USA Eastern Standard Time.
- *Mastercam Tutorials*—We offer a series of tutorials to help registered users become familiar with basic Mastercam features and functions. Visit our website, or select **Help, Tutorials** from Mastercam's **File** tab to see the latest publications.
- *Mastercam University*—Mastercam University, an affordable online learning platform, gives you 24/7 access to Mastercam training materials. Take advantage of more than 180 videos to master skills at your own pace and help prepare for Mastercam Certification. For more information on Mastercam University, please contact your Authorized Mastercam Reseller, visit [university.mastercam.com/](http://university.mastercam.com/), or email [training@mastercam.com](mailto:training@mastercam.com).

- *Online Communities*—You can find a wealth of information at [www.mastercam.com](http://www.mastercam.com).
  - Follow us on Facebook ([www.facebook.com/Mastercam](http://www.facebook.com/Mastercam)), Twitter ([twitter.com/Mastercam](http://twitter.com/Mastercam)), and Instagram ([www.instagram.com/mastercamcadcam/](http://www.instagram.com/mastercamcadcam/)) for the latest tech tips and Mastercam news.
  - See Mastercam in action on YouTube ([www.youtube.com/user/MastercamCadCam](http://www.youtube.com/user/MastercamCadCam)).
  - For more information on CNC Software, Inc., to find and apply to jobs, and connect with people using Mastercam, visit us on LinkedIn ([www.linkedin.com/company/cnc-software/](http://www.linkedin.com/company/cnc-software/)).
  - Registered users can search for information or ask questions on the Mastercam Web forum, [forum.mastercam.com](http://forum.mastercam.com), or use the Mastercam Knowledgebase at [kb.mastercam.com](http://kb.mastercam.com).

## Contact Us

For questions about this or other Mastercam documentation, contact the Technical Documentation department by email at [techdocs@mastercam.com](mailto:techdocs@mastercam.com).

# INSTALLING AND SETTING UP LICENSES

A license is required to run Mastercam 2020. This license can be a hardware license, such as a HASP or a NetHASP, or a software license. Listed below are installation steps for each license type, how to set up servers, and how to monitor licenses.

## Installing a Hardware License

Use the procedures below to install and setup your hardware license.

### Installing a HASP

Mastercam uses HASPs for single-user hardware licensing. Follow the procedure below to install your HASP for a single user.

1. Locate an available USB port on the computer.
2. Plug the HASP into the port.

#### CAUTION

The HASP attaches to your port in only one orientation. Do not force it into the port as you may damage the port and the HASP.

### Installing a NetHASP

Mastercam 2020 uses a NetHASP to service Mastercam installations from a central location. Because these licenses are served over a network, a firewalled server running a NetHASP must allow the license server to communicate through the firewall. This requires two configuration steps:

- The firewall must be configured to open port 475.
- The NetHASP server program (`C:\windows\syswow64\nhsrvce.exe`) must be allowed to work through the firewall.

Please consult your firewall documentation for instructions on how to change these settings.

#### NOTE

The NetHASP is followed by a number indicating the maximum number of simultaneous seats of each licensed product, such as NetHASP-20 or NetHASP-50. All product groups must be the same version.

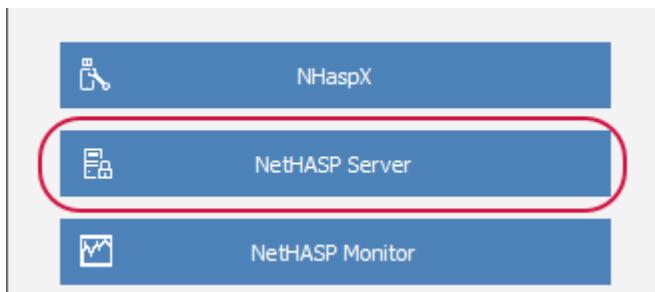
#### CAUTION

Keep the NetHASP in a physically safe place. All Mastercam users on the network are vulnerable to its loss.

## Setting Up a NetHASP Server

To set up a NetHASP server, follow the procedure below.

1. Connect the NetHASP to a USB port on the computer you want to use as the NetHASP server.
2. Open the Mastercam 2020 installer.
3. In the Mastercam Installer, select **Utilities**, **NetHASP Server** and follow the instructions.



### NOTE

If you installed Mastercam 2020 onto your current computer, then the NetHASP drivers have already been installed with Mastercam.

4. Select **Finish** to exit when the installation is complete.

### NOTE

You can, but are not required to, install Mastercam products on the NetHASP server.

5. Use the NHasp utility to check available Mastercam licenses.

## Setting Up Mastercam with a NetHASP

After setting up the NetHASP server, you will need to set up Mastercam 2020 to use it. Follow the procedure below.

### NOTE

The following procedure is for client-side configuration.

1. Install Mastercam 2020.
2. Install the TCP/IP network protocol, if it is not already installed.
3. Run **NHaspX.exe**. It is located in the Mastercam 2020 **Start** menu folder.
4. Set **Mode to Network**.



5. From the Mastercam's installation's support folder, copy the `nethasp.ini` file to your desktop.
6. Use your preferred text editor to edit the `nethasp.ini` file for the appropriate network protocol and identify the computers that are being used as the NetHASP server.

7. Copy the edited `nethasp.ini` file to the main Mastercam directory. By default, this directory is `C:\Program Files\Mastercam 2020\Mastercam`.

**NOTE**

Configuring the `nethasp.ini` file to look for the NetHASP server at a specific address improves the time it takes a computer to find the server on the network. By omitting this step, when Mastercam 2020 launches and checks for network licenses, it takes extra time to search all computers on the network to find the NetHASP server. If all licenses have been checked out by other Mastercam 2020 users on your network, the search might take an especially long time.

8. When you launch Mastercam 2020, it looks at the specified address.

## Installing a Software License

Use the procedures below to install and setup your software license. If Mastercam is not installed, you can download CodeMeter and the Mastercam Activation Wizard from the Mastercam website ([www.mastercam.com/Support-Downloads-Drivers-and-Applets](http://www.mastercam.com/Support-Downloads-Drivers-and-Applets)).

### Activating Your License

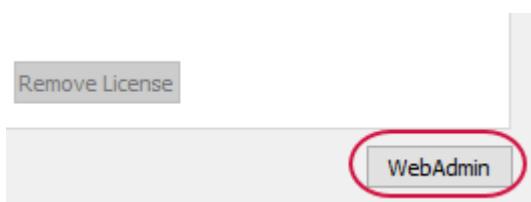
To activate your license, select **Start, Mastercam Licensing Utilities, Activation Wizard** (Windows 10) or **Start, All Programs, Mastercam Licensing Utilities, Activation Wizard** (Windows 7 or 8). Then follow the instructions.

Select the **Help** button in the Activation Wizard for a specific procedure on activating a license.

### Enabling the CodeMeter Server

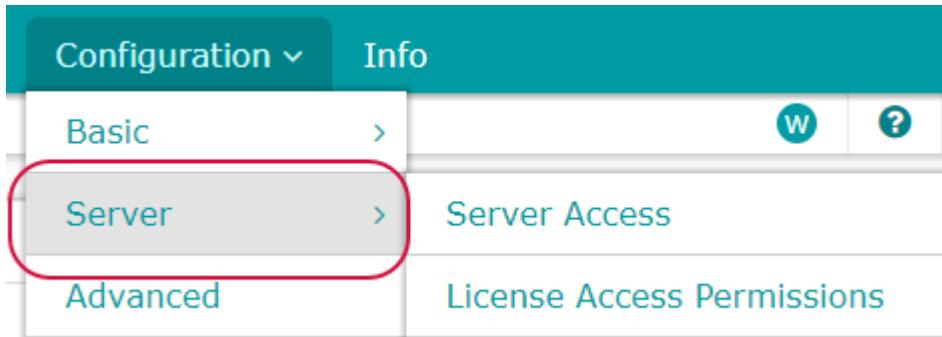
To enable the CodeMeter server, do the following.

1. Select **Start, CodeMeter, CodeMeter Control Center** (Windows 10) or **Start, All Programs, CodeMeter, CodeMeter Control Center** (Windows 7 or 8).  
The **CodeMeter Control Center** dialog box displays.
2. In the **CodeMeter Control Center** dialog box, select **WebAdmin**.



Your default browser then displays the CodeMeter WebAdmin website.

3. Select Configuration, Server.



4. Set Network Server to Enable. Then click Apply.

**Network Server**

Disable  
 Enable

Network Port: 22350

**CmWAN Server**

Disable  
 Enable

**Apply**   **Restore Defaults**

This will broadcast the software license over the network.

**NOTE**

**Network Port** must be set to 22350.

5. Make note of the IP address of the server. You will need this if the user computer has difficulty contacting the server.

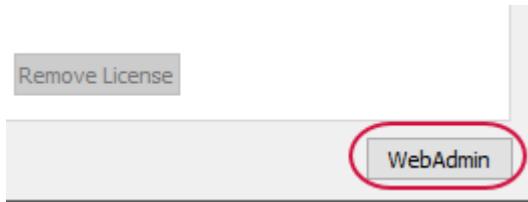
## Setting the User Connections

Once the license has been activated on the server, Mastercam users should be able to install and run Mastercam. Occasionally some users may have difficulty finding the server. The following procedure directs a client to the server.

1. Select Start, CodeMeter, CodeMeter Control Center (Windows 10) or Start, All Programs, CodeMeter, CodeMeter Control Center (Windows 7 or 8).

The CodeMeter Control Center dialog box displays.

2. In the **CodeMeter Control Center** dialog box, select **WebAdmin**.



Your default browser then displays the CodeMeter WebAdmin website.

3. Select **Configuration**.



4. Select **Add new server**.
5. Enter the Server IP address of the PC or server that is hosting the network license, and then click **OK**.
6. Click **Apply**, and close the CodeMeter WebAdmin website.

The user PC can now run Mastercam.

## Installing a Mill-Turn License

Mastercam also supports licenses specifically for Mastercam Mill-Turn. This license is bound to a specific HASP or NetHASP SIM number. The HASP or NetHASP is used as the license to run Mastercam, and a software license is used as the license to run Mill-Turn. Mill-Turn licenses can also be a fully software based license.

### NOTE

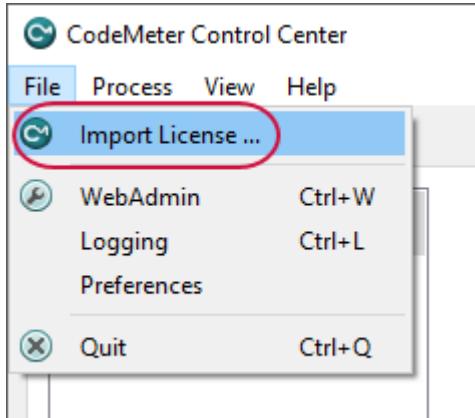
If you are installing Mastercam Mill-Turn as a fully software based license, refer to "["Installing a Software License" on page 9](#) instead.

After updating your HASP or NetHASP with the Mill-Turn code file, follow the procedure below to install the software license:

1. Ensure that the HASP or NetHASP used to run Mastercam is plugged into the computer that the Mill-Turn binding file will be installed on.
2. Select **Start, CodeMeter, CodeMeter Control Center** (Windows 10) or **Start, All Programs, CodeMeter, CodeMeter Control Center** (Windows 7 or 8).

The **CodeMeter Control Center** dialog box displays.

### 3. Select File, Import License.



4. Browse to the .WibuCmRaU file that was sent with your Mill-Turn codes and click **Import**.

5. After the license has been successfully imported, a dialog box will display.

#### NOTE

If you receive any errors during this process, please contact your Mastercam Reseller.

6. The **CodeMeter Control Center** dialog box now displays a Mastercam Mill-Turn license with your HASP or NetHASP serial number in the name.

If the license is to be installed on a server running a NetHASP, the CodeMeter server will need to be enabled to broadcast the Mill-Turn license across the network. Refer to "["Installing a Software License" on page 9](#)" for how to enable the CodeMeter server.

## License Monitoring

If you have a NetHASP or software license, you can monitor license activity. Monitoring a license allows you to see :

- Which products are licensed
- The number of active users
- The maximum number of users
- The number of available licenses for each product

## NetHASP Monitoring

NetHASPs allow you to monitor licenses through either the NHaspX utility or the Aladdin Monitor.

## NHaspX Utility

You can monitor NetHASP activity using the NHaspX utility. Select the **Active licenses** button to monitor the activities listed in the previous section. **Mode** must be set to **Network** in the NHaspX dialog box to enable the **Active licenses** button.

The NHaspX utility does not report the licenses that are checked out on the computer on which it is running. Also, it may run slowly if the `nethasp.ini` file is not present or is set up incorrectly.

## Aladdin Monitor

Besides using the NHasp utility, you can use the Aladdin Monitor utility to view a list of users logged in to the NetHASP server. To install the Aladdin Monitor, run the Mastercam installation program from the Mastercam 2020 installation media, choose **Utilities**, and then **NetHASP Monitor**, and follow the instructions.

Aladdin Monitor is a third-party application for monitoring NetHASP usage and is included with Mastercam for your convenience. However, CNC Software, Inc. can provide only limited support for this application. Contact Gemalto ([www.gemalto.com](http://www.gemalto.com)) for technical support issues.

The procedure below is a basic workflow of using the Aladdin Monitor.

1. Run the Aladdin Monitor by selecting **AKS Monitor** from the **Aladdin** folder in the **Start** menu.
2. In the left window pane, select the NetHASP to monitor.
3. The right window pane then updates with that NetHASP's information.

After you select a NetHASP, the **Program table** lists the following information:

- Mastercam products in use (Program number).
- Number of users currently using each product.
- Maximum users allowed for each product.
- Remaining product activations.

Program table				
Program No	Current Stations	Maximum Stations	Activations Left	
1	3	10	Unlimited	
5	1	10	Unlimited	

Refer to the following table for program numbers and their equivalent Mastercam products.

Program Number	Mastercam Product	Program Number	Mastercam Product	Program Number	Mastercam Product
1	[NHaspX tech info]	13	Router	42	CATIA V4 Read/Write
2	Mill Entry	14	Router 3D	43	Unigraphics Read
3	Mill	17	Art	44	Swarf 5-axis
4	Mill	19	Multiaxis	46	Mastercam for SOLIDWORKS 2D
5	Mill 3D	24	CoroPlus	48	Mastercam for SOLIDWORKS 3D
6	Lathe Entry	28	ProDrill	49	Port Expert
7	Lathe	29	STEP Read	50	Blade Expert
8	Wire	31	Engraving	52	Mastercam for SOLIDWORKS Lathe

Program Number	Mastercam Product	Program Number	Mastercam Product	Program Number	Mastercam Product
9	Design	32	Curve 5-axis/Drill 5-axis	53	Probing
10	Solids	37	ProE/Creo Read	56	CATIA V5 with PMI
11	Router Entry	40	CATIA V5 Read	57	Mori APT/CL Post
12	Router	41	CATIA V5 Write	60	Mill-Turn

The **Login table** box displays details for the selected product. This information includes:

- User login ID (IP address)
- User host name
- Network protocol being used
- Period of inactivity required before the product entry is deleted.

Login table for program # 1				
No	Login ID	Host Name	Protocol	Timeout
1	172.16.721.21	[REDACTED]	UDP	897254

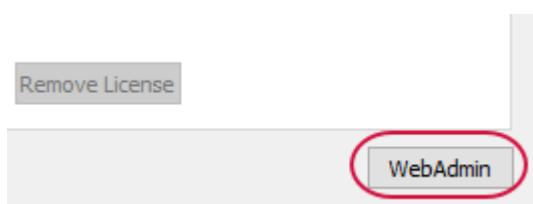
## Software License Monitoring

You can use CodeMeter to monitor active software licenses. You can, but are not required to, install Mastercam products on your server. However, to act as a server, the host computer must have an active CodeMeter license. The applications to activate the license and run the CodeMeter software are installed by default when you install Mastercam.

If Mastercam is not installed, you can download CodeMeter and the Mastercam Activation Wizard from the Mastercam website ([www.mastercam.com/Support-Downloads-Drivers-and-Applets](http://www.mastercam.com/Support-Downloads-Drivers-and-Applets)).

Once your server and users have been setup, you can use the CodeMeter Web Admin (accessed from the **CodeMeter Control Center** dialog box by selecting **WebAdmin**) to monitor software licenses. Follow the procedure below to go to the license monitoring page of CodeMeter.

1. Select **Start, CodeMeter, CodeMeter Control Center** (Windows 10) or **Start, All Programs, CodeMeter, CodeMeter Control Center** (Windows 7 or 8).  
The **CodeMeter Control Center** dialog box displays.
2. In the **CodeMeter Control Center** dialog box, select **WebAdmin**.



Your default browser then displays the CodeMeter WebAdmin website.

3. If you are not on the server hosting the license, select the **Current Server** button located at the bottom of the WebAdmin page. Select the server you wish to monitor and click **Apply**.
4. Select **Licensing Monitoring, All Licenses**.



5. To view more details about which user has each license checked out, select the **Product Code** number for the license you wish to view more information about.

CodeMeter allows for the simultaneous use of up to 500 seats of each licensed product. If the number of seats in your network exceeds this amount, you must set up an additional server on another workstation.

# UPDATING MASTERCAM PRODUCTS AND LICENSES

Use the procedures below to update the Mastercam product or a Mastercam license.

## Updating a License

Use the procedures below to update your hardware or software licenses.

### Updating Hardware Licenses

You must update your Mastercam licensing hardware (HASP or NetHASP) with an update code obtained from your Reseller or CNC Software, Inc. Customer Service. This needs to be done when you install or upgrade to a new release of Mastercam, and if you are not on Mastercam Maintenance.

The update code is a file delivered to you by one of these methods:

- Included in your Mastercam 2020 software kit.
- Mailed on electronic media.
- Emailed as a file attachment.

Contact your local Mastercam Reseller if you cannot locate your update code.

If you received your update code via email, save the file attachment to an accessible location. Do not change the file extension. If you received your updated code via post or as part of an installation kit, insert the received media in the appropriate drive to access the file.

Update codes have a file extension that indicates the type of license they update. The Mastercam installation program associates these file extensions with the program that you use to update the SIM codes.

File Extension	License Type	Update Program
* .HCODE	HASP	HaspX.exe
* .NHCODE	NetHASP	NHaspX.exe

## Updating a HASP

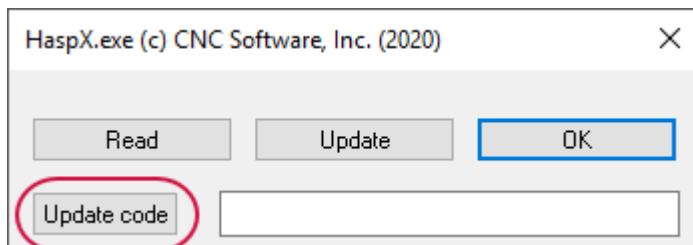
You can enter a HASP code automatically by double-clicking the update code file (\* .HCODE). To update the code manually for both the update code file and the update code string, do the following.

#### CAUTION

Before updating, you must have Mastercam installed. You must complete the following procedure on the computer to which the HASP is attached. Updates over a remote connection will fail.

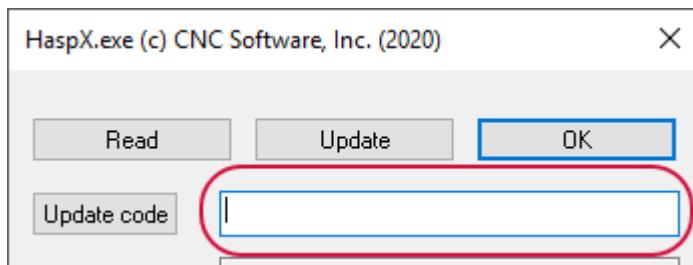
1. Choose one of the following methods to run **HaspX.exe**.
  - a. (Windows 7 and 8) Select **Start, All Programs, Mastercam 2020, Utilities, Hasp X**.
  - b. (Windows 10) Select **Start, Mastercam 2020, Hasp X**.

- c. Use Windows Explorer to navigate to the Mastercam 2020 installation location, and double-click **HaspX.exe**.
  - d. If Mastercam is not installed on the server, run the Mastercam Installer. Select **Utilities, NHaspX** or you can download NHaspX from the Mastercam website ([www.mastercam.com/Support-Downloads-Drivers-and-Applets](http://www.mastercam.com/Support-Downloads-Drivers-and-Applets)).
2. Depending on what type of update code that you received, follow one of the steps below:
- a. If you received a \*.HCODE file to update your HASP, select **Update code**. Navigate and open the .HCODE file.



The HaspX utility extracts the update code from the file.

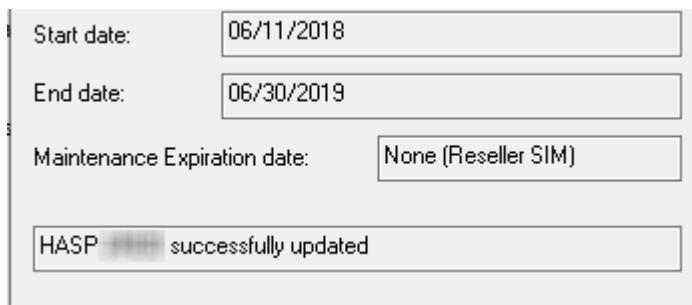
- b. If you received the update code as a string of numbers, enter the code into the text box indicated below. The code must be entered in exactly as it was received, including spaces and dashes.



3. Select **Update**. HaspX updates the license and displays the products (including any newly activated products) that the license supports.

Start date:	<input type="text" value="09/21/2018"/>
End date:	<input type="text" value="06/30/2019"/>
Maintenance Expiration date:	<input type="text" value="None (Reseller)"/>
 <b>HASP found</b>	

4. Once you update the license, the **HaspX** dialog box displays important license information at the bottom of the dialog box.



- Click **OK** to exit the **HaspX** dialog box.

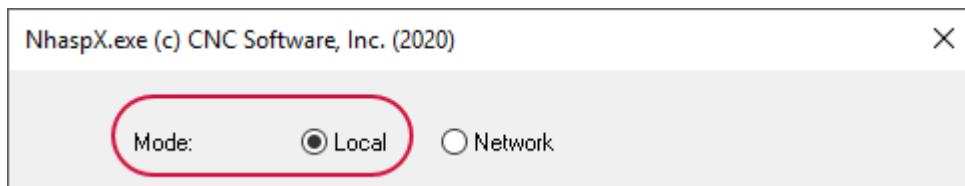
## Updating a NetHASP

You can enter a NetHASP code automatically by double-clicking the update code file (\*.NHCODE). To update the code manually, do the following.

### CAUTION

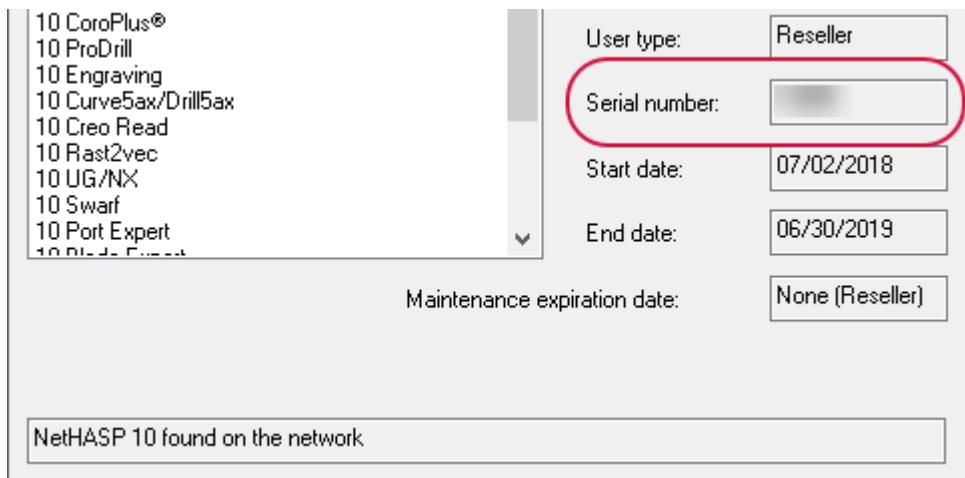
This update must be done only on the computer on which the NetHASP is attached. This process cannot be completed over a remote connection.

- Choose one of the following methods to run **NHaspX.exe**.
  - (Windows 7 and 8) Select **Start, All Programs, Mastercam 2020, Utilities, NHaspX**.
  - (Windows 10) Select **Start, Mastercam 2020, NHaspX**.
  - Use Windows Explorer to navigate to the Mastercam 2020 installation location, and double-click **NHaspX.exe**.
- In the **NHaspX** dialog box, ensure that **Mode** is set to **Local**.



NHaspX analyzes the license and displays the serial number and current Mastercam products.

- Verify that the displayed **Serial number** matches the serial number provided with your Mastercam 2020 software kit.



**NOTE**

Keep a record of the serial number in the event that you need to contact Technical Support at CNC Software, Inc. or your Reseller.

4. Select **Update code file**. The **Select an Update Code file** dialog box displays.
5. Select an update code file (\* .NHCode), and click **Open**.
6. In the **NHaspX** dialog box, select **Update**. NHaspX updates the SIM and displays the products for which the SIM has been activated.
7. Change the **Mode** back to **Network**.
8. Select **OK** to exit the **NHaspX** dialog box.

## Updating a Software License

As with hardware licenses, when you install or upgrade to a new release of Mastercam, you must update your Mastercam licensing software with an update code.

If the software license is being updated on the same computer it is currently on, you do not need to deactivate and reactivate it. However, if you plan to move the location of the software license to another computer or network, you must deactivate it and then reactivate on the new location before updating.

To deactivate your license, select **Start, Mastercam Licensing Utilities, Activation Wizard** (Windows 10) or **Start, All Programs, Mastercam Licensing Utilities, Activation Wizard** (Windows 7 or 8). Then follow the instructions.

If Mastercam is not installed, you can download CodeMeter and the Mastercam Activation Wizard from the Mastercam website ([www.mastercam.com/Support-Downloads-Drivers-and-Applets](http://www.mastercam.com/Support-Downloads-Drivers-and-Applets)).

For more information on how to deactivate and activate licenses, refer to the Help in the Activation Wizard.

## Updating Mastercam

Use the procedures below to update Mastercam to the latest version.

**CAUTION**

The following instructions apply only to English-based Mastercam installations with updates received from CNC Software, Inc. For more information on downloading non-English Mastercam updates from other locations, contact your local Mastercam Reseller.

A maintenance upgrade is an executable file that you run to update your installation. Before you do an update, you must exit Mastercam. If you start an update with Mastercam open, you are asked to close all sessions running Mastercam on the computer before continuing with the update installation.

1. Download the latest update from the Mastercam website ([www.mastercam.com/Support/Downloads](http://www.mastercam.com/Support/Downloads)), or get the update from your local Mastercam Reseller.
2. Copy the downloaded file to the computer on which you want to update.
3. If Mastercam is running, close it.
4. Double-click the update file, and follow the instructions.
5. When the installation is complete, click **Finish**.

You can also update Mastercam with the Automatic Update Service (AUS).

1. Open Mastercam.
2. Select **File, Help, Check for Updates**. The **Mastercam Updates** dialog box displays.

**NOTE**

Your computer must be connected to the Internet to check for updates.

3. The dialog box will display the date of the most recent check for updates. Select or deselect the checkboxes to **Automatically check for updates** or to **Show new update alerts**.
4. Click **Check Now**.
5. Follow the prompts to install the update.

# LAUNCHING MASTERCAM

Mastercam determines the initial license type automatically when it starts. However, there are other ways to force Mastercam to always start with a specific license type.

On start up, Mastercam attempts to connect to a HASP, which is the default license type for Mastercam 2020. Mastercam searches for the licenses in the following order:

- HASP
- Software (local)
- Software (network)
- NetHASP

If you do not have any of the above licenses currently activated, you will then be asked if you have an activation code. If you select **Yes**, the Activation Wizard opens. If you select **No**, Mastercam closes and no further action takes place.

## Mastercam Launcher

The Mastercam Launcher controls start up options for a seat (license) of Mastercam. You can set the following Mastercam start up options:

- Assign product levels and availability.
- Create a customized Mastercam shortcut on the desktop based on current settings.

The Mastercam Launcher recognizes which type of license you have on your machine, and this dialog box displays only those options you can change. To open the Mastercam Launcher, select **Start, Mastercam 2020, Mastercam Launcher**.

Select the **Help** button to learn more about the items that are displayed.

## Command-lines

You can use command-line switches for specific tasks when launching Mastercam. These include:

- Overriding the initial license type.
- Loading licenses for selected product levels and add-ons.
- Requesting specific network licenses on start up.
- Opening Mastercam in a particular product or product level, or to suppress products with single-user licenses.

### NOTE

Shortcuts created by the Mastercam Launcher include the appropriate command-line switches.

## Command-line Switches

Listed below are all command-line switches for Mastercam products. However, not all products may be included with your Mastercam installation.

**NOTE**

If you use a command-line switch to suppress products or check out a lower level product than what is supported by your license, a message displays the products enabled by the license and modified by the command-line switch.

## License Types

Use these command-line switches to override the default registry settings.

- **/H** = Sets the initial license type to HASP.
- **/N** = Sets the initial license type to NetHASP.
- **/Software** = Sets the initial license type to Software (local, then network).
- **/SoftwareLocal** = Sets the initial license type to Software (local only).
- **/SoftwareLan** = Sets the initial license type to Software (network only).

## Mastercam Design

- **/D** = Design only. Requires a stand-alone Design license. For example, use this switch if you want to load a part that contains toolpaths but do not want to check out a Mill, Lathe, or Router license.
- **/noD** = Disable Design only.

## Mastercam Mill

- **/ME** = Mill Entry.
- **/M2** = Mill.
- **/M3** = Mill 3D.
- **/noM** = Disable Mill.

## Mastercam Lathe

- **/LE** = Lathe Entry.
- **/L1** = Lathe.
- **/noL** = Disable Lathe.

## Mastercam Router

- **/RE** = Router Entry.
- **/R2** = Router.
- **/R3** = Router 3D.
- **/noR** = Disable Router.

## Mastercam Wire

- **/W2** = Wire.
- **/noW** = Disable Wire.

## Mastercam Art

- **/Art** = Art.
- **/noArt** = Disable Art.

## Mastercam Mill-Turn

- **/MT1** = Simplified access to Mill-Turn functions for Lathe users.
- **/MT2** = Full access to Mill-Turn functions.
- **/noT** = Disable Mill-Turn.

## All Products

- **/noRem** = Suppress product messages.

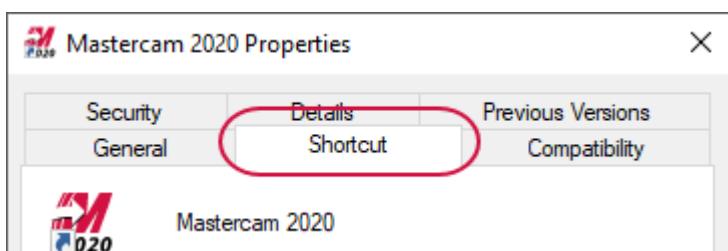
## Mastercam Add-ons

- |                                 |   |
|---------------------------------|---|
| • <b>/C5</b> = CurveDrill5ax.   | • <b>/noC5</b> = Disable Curve/Drill5ax.  |
| • <b>/Engr</b> = Engraving.     | • <b>/noEngr</b> = Disable Engraving.     |
| • <b>/Port</b> = Port Expert.   | • <b>/noPort</b> = Disable Port Expert.   |
| • <b>/Blade</b> = Blade Expert. | • <b>/noBlade</b> = Disable Blade Expert. |
| • <b>/Probe</b> = Probing.      | • <b>/noProbe</b> = Disable Probing.      |
| • <b>/X5</b> = Multiaxis        | • <b>/noX5</b> = Disable Multiaxis.       |
| • <b>/Nest</b> = Nesting.       | • <b>/noNest</b> = Disable Nesting.       |
| • <b>/SW5</b> = Swarf 5-axis    | • <b>/noSW5</b> = Disable Swarf 5-axis.   |
| • <b>/PD</b> = ProDrill.        | • <b>/noPD</b> = Disable ProDrill.        |

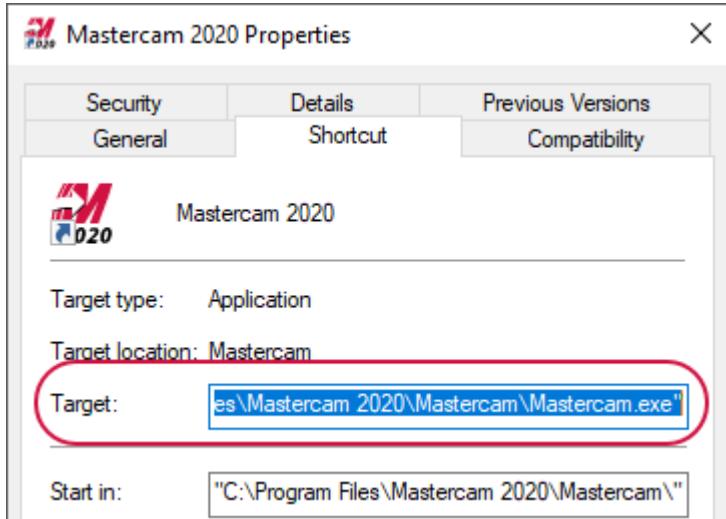
## Using Shortcuts and Command-lines

Use the following procedure to set command-line switches for a Mastercam

1. From your desktop, right-click on the Mastercam 2020 shortcut and select **Properties**.  
The **Mastercam 2020 Properties** dialog box displays.
2. Select the **Shortcut** tab.



3. Add one or more command-line switches to the **Target** parameter.



Precede each command by a "/" and separate each by a space. For example, to request a single Mill Entry license at start up, enter:

"C:\Program Files\Mastercam 2020\Mastercam\Mastercam.exe" /ME

To request a Mill 3D license and a Router license:

"C:\Program Files\Mastercam 2020\Mastercam\Mastercam.exe" /M3 /R2

#### NOTE

The **Target** must have quotation marks around the directory path and the command-line options must be outside of the quotation marks.

4. To accept the command-line changes to the Mastercam shortcut, click **OK** to exit the **Properties** dialog box.

# CUSTOMIZING YOUR MASTERCAM INSTALLATION

If you are setting up Mastercam to install on multiple computers, or would like to have all user installations use the same files, use the sections below to customize your installations.

## **NOTE**

Mastercam 2020 cannot be installed on a drive created with the SUBST command. Use the actual path to the desired installation folder, not the substituted drive letter.

## **CAUTION**

Changing any of the files below will affect your Mastercam installation. It is recommended that you do not modify these files unless you have experience with making the necessary modifications.

## Setting Registry Options

To run Mastercam 2020, you need permission to read from the following registry key. This key is created when Mastercam 2020 first launches and stores user-specific settings.

`HKEY_LOCAL_MACHINE\SOFTWARE\CNC Software, Inc.\`

You also need to have read and write permission for this registry key. This key is created when Mastercam 2020 first starts and is used to store per-user settings.

`HKEY_CURRENT_USER\SOFTWARE\CNC Software, Inc.\`

Registry permissions are the Windows defaults, so no adjustment should be needed in a default Windows installation.

## Setting Group Policies

Setting group policies can severely restrict permissions on Windows systems. These registry permissions are the windows defaults, so no adjustment should be needed in a default Windows user configuration.

Most other group policies have no effect on Mastercam's ability to run. However, a combination of group policies may cause issues with Mastercam 2020.

## Setting Installation Defaults

You can set installation defaults in the `mcim.ini` file, which is included in the `\support` folder in the installation media. The `mcim.ini` file is text that contains the defaults for the following installation settings:

- Installation language
- Program language
- Units
- Installation type
- Destination directory

To set these defaults, follow the procedure below.

1. Copy the contents of the installation media to a local or network drive.
2. Open `mcim.ini` in your preferred text editor. Do not use a word processor to open this file.
3. To disable a setting, comment it out by inserting `;;` before the first character of the line.
4. Save the file.

**NOTE**

You must run modified installations from the saved location.

## IF YOU NEED MORE HELP

For assistance with installing Mastercam 2020, licensing, or to obtain more information on using Mastercam 2020, contact your local Mastercam Reseller. If your Mastercam Reseller is unavailable, you can call CNC Technical Support. When calling CNC Software, Inc. for technical support, please follow these guidelines:

- Be sure you have already tried to contact your Mastercam Reseller.
- Provide the serial number of your HASP, NetHASP, or software license.
- Be ready to describe the problem in detail. Write down what happened, particularly if you cannot call immediately after the problem occurs.
- Be in front of your computer when you call.
- If possible, try to duplicate the problem before calling. Our Support Services technician may require you to duplicate the problem while you are on the phone.
- When you call, have ready a complete description of your hardware, including your operating system (OS), central processing unit (CPU), graphics card and settings, and memory.

You can also leave a message twenty-four hours a day, seven days a week via our email or website addresses. When sending email, please include:

- The serial number of your HASP, NetHASP, or software license
- Telephone number and contact information where you can be reached
- Files required to reproduce an issue

Use Mastercam's Zip2Go utility to gather and compress open part data into a ZIP file. This utility makes it easy to provide your Mastercam Reseller or CNC Software, Inc. with a file attachment that contains the information they need. Zip2Go scans the machine groups in your current file and captures information such as your machine groups, configuration files, post files, tool and material libraries and toolpath files. For more information on using Zip2Go, please refer to the Mastercam Help.

### Important Contact Information

Address	CNC Software, Inc. 671 Old Post Road Tolland, Connecticut, 06084-9970 USA
Phone	+1 860-875-5006
Fax	(860) 872-1565
Mastercam Knowledge Base	<a href="http://kb.mastercam.com">http://kb.mastercam.com</a>
Mastercam Forum	<a href="http://forum.mastercam.com">http://forum.mastercam.com</a>
Website	<a href="http://www.mastercam.com">http://www.mastercam.com</a>
Email	<a href="mailto:support@mastercam.com">support@mastercam.com</a>

# Troubleshooting

Listed below are common issues that may occur after installing Mastercam or a Mastercam license. For more specific Mastercam issues, refer to the Mastercam KnowledgeBase (<https://kb.mastercam.com/>).

## Repairing an Installation

If you encounter a problem after installation and no problems were detected with your license, you may need to repair your Mastercam 2020 installation.

1. Launch the Mastercam installation from the USB drive or from the Mastercam website download.
2. Select **Repair**, and follow the instructions.

## Reinstalling NetHASP/HASP Drivers

Mastercam 2020 automatically installs NetHASP and HASP drivers. If the installation procedure was not completed, or if the drivers were removed Mastercam cannot recognize the NetHASP or HASP.

For HASP drivers, select **Hasp Setup** from the Mastercam 2020 **Start** menu folder, and then follow the onscreen instructions.

For NetHASP drivers, run **haspdinst.exe** from the Mastercam \common folder directory (for example, C:\Program Files\Mastercam 2020\Mastercam\common), and then follow the onscreen instructions.

## Common Error Messages

Listed below are common error messages that display when attempting to start Mastercam or activate a license.

### All available licenses are in use.

The maximum allowable number of users have checked out the product.

### Requested Product Code is not available / Error checking out a *product name* license. No licenses have been purchased for this product.

Contact your local Mastercam Reseller.

### Active NetHASP server not found.

The NetHASP license manager is not running. Check the NetHASP server and restart as necessary.

### Authorization period on the license has expired.

An expired temporary license is being used to run Mastercam. A new code with a extended or permanent end date is required to launch the software.

### The SIM has become disconnected. Mastercam will automatically shut down. You will get one chance to save your file.

Approximately once every two to 10 minutes, Mastercam verifies that the NetHASP server is still running and that the NetHASP is attached to the server. If this test fails, for example, due to a power loss or server failure, this error message displays on all computers running Mastercam.

You must save your work quickly and shut down Mastercam. Check the NetHASP connection and reconnect as necessary.

**The Mastercam version you have attempted to run is not supported by your Maintenance contract. Please contact your local Mastercam Reseller for assistance.**

The maintenance date of the license being used is not valid for the version of Mastercam that is attempting to open. If your maintenance is still valid, you will need to get a copy of your updated license from your Reseller. If you are no longer on maintenance, you will need to renew your contract to run this release of the software.

**No Server found which has allowed access to this computer.**

The workstation is not authorized to access the license server. Open the CodeMeter Control Center from the **Start** menu (under the **CodeMeter** folder).

**Network communication error.**

The software license is no longer communicating with the server. Save your work quickly and shut down Mastercam. Open the CodeMeter Control Center and click the **WebAdmin** button to troubleshoot.

**SIM Not Found**

Mastercam could not find your license. Try the following suggestions:

- Remove and reconnect the HASP or NetHASP.
- Try installing the HASP or NetHASP in a different port.
- Check that the light at the end of the HASP or NetHASP is on. If it is not on, the HASP or NetHASP is either broken or not receiving power from the SUB port.
- Reinstall the HASP drivers.

## Frequently Asked Questions

Listed below are frequently asked question about licensing, installation, and other administrative issues.

**Will a temporary license expire if the computer is offline?**

Yes.

**What happens if the hard disk on the software license host computer crashes?**

A new license is required. The lost, stolen, or damaged license policy applies.

**Can localized and native English versions of Mastercam be used with the same software license?**

Yes.

**Does software licensing work with virtual servers?**

Yes

**Can I use one software license with multiple computers? / Is there a process for changing computers?**

You cannot use one license simultaneously on multiple computers. If you would like to run on a different computer (such as your home computer), you will need to deactivate the license on the first system and activate it on the other. Mastercam software licenses do not currently support borrowing.

If the original computer host is lost, stolen, or damaged, the Lost, stolen or damaged license policy is applied to acquire a new license.

**Can a software license be passed to a remote computer that is disconnected from a network?**

No.

**What happens if the server subnet is changed?**

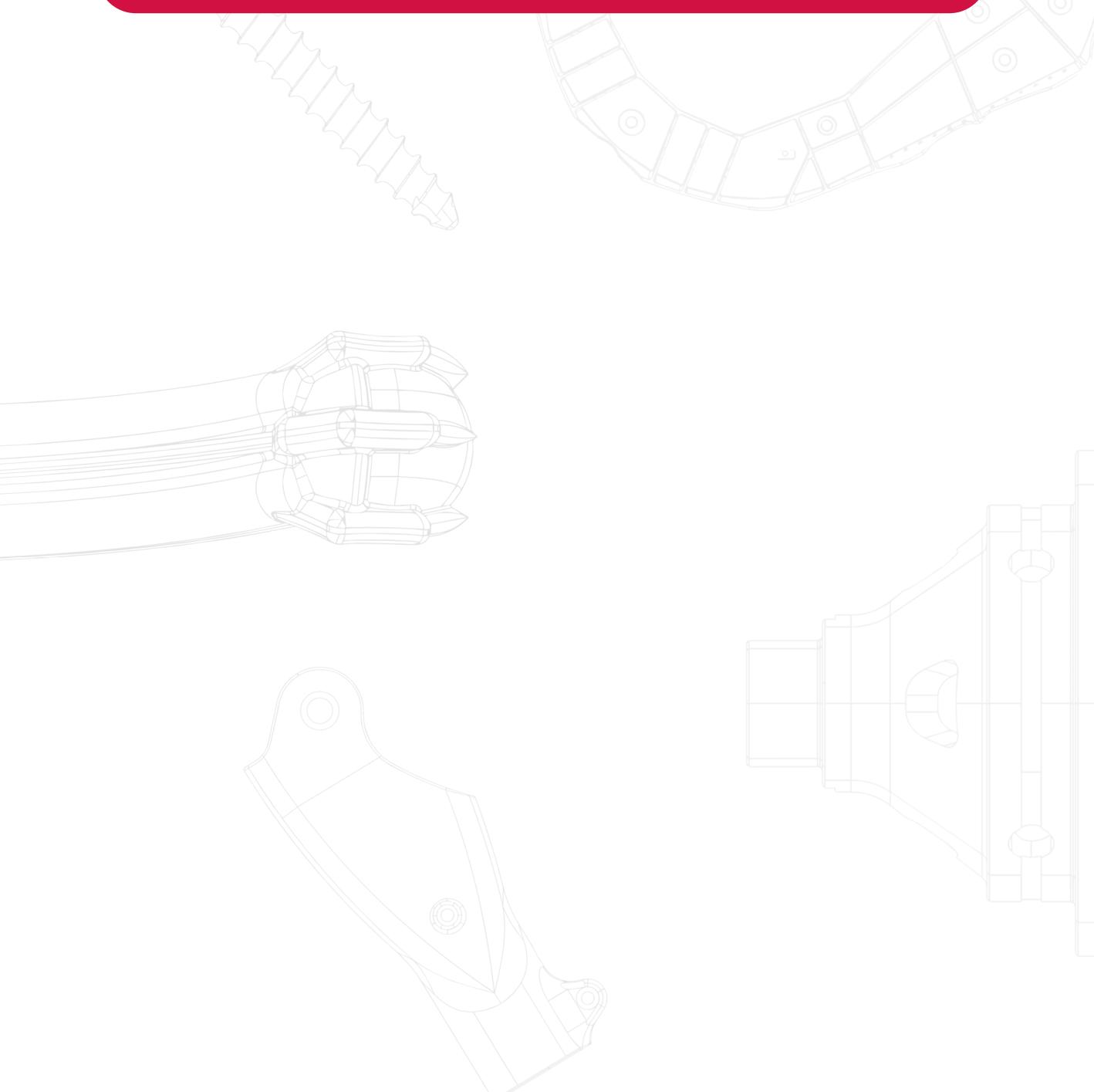
The software licenses will continue to function. You may need to re-point computers running the software licenses to the new server.

**Do I need a new activation code when the next version of Mastercam is released?**

No, a new activation code is not needed. The software license will need to be reactivated when maintenance is renewed, but the activation code remains the same.



**ATTENTION! UPDATES MAY BE AVAILABLE.  
PLEASE REFER TO [MASTERCAM.COM/SUPPORT](http://MASTERCAM.COM/SUPPORT)  
FOR THE LATEST DOWNLOADS.**



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