Mastercam

Mastercam 2024 Administrator Guide

February 2023

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Software: Mastercam 2024

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https://www.mastercam.com/legal/

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. The Resolved Issues website—installed with each release—includes the latest information about Mastercam features and enhancements.

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Introduction

The Mastercam 2024 Administrator Guide covers the installation, updating, and administration of Mastercam's licenses and products.

> 📄 **NOTE**
> This document covers only hardware licensing. For information on software licensing, refer to the Activation Wizard help. Select **Start**, **Mastercam Licensing Utilities**, **Activation Wizard Help**.

Before You Begin

Mastercam 2024 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 two types of folders: 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 2024\Mastercam
C:\Program Files\Common Files\Mastercam
Documents (User-modifiable)
C:\Users\<User name>\Documents\My Mastercam 2024\Mastercam
C:\Users\Public\Public Documents\Shared Mastercam 2024

Installing and Setting Up Licenses

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

Installing a Software License

This document does not cover installing a software license. For information on software licensing, refer to the Activation Wizard help. Select Start, Mastercam Licensing Utilities, Activation Wizard Help.

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.

Installing a NetHASP

Mastercam 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\nhsrvice.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 USB Mastercam installer.

3. Select Utilities, NetHASP Server and follow the instructions.
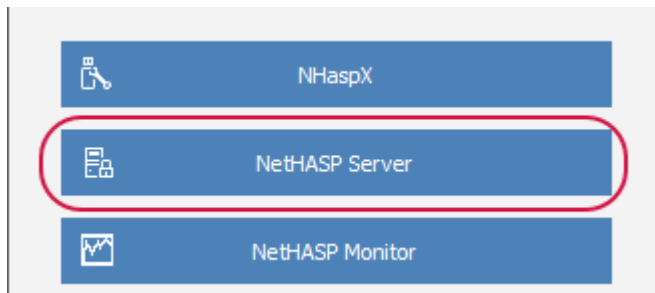
4. Select Finish to exit when the installation is complete.

> 📑 **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 for use. Follow the procedure below.

> 📑 **NOTE**
>
> - The following procedure is only for client-side configurations that need to point to a specific server IP address.
>
> - 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 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 users on your network, the search might take an especially long time.
>
> - If all licenses are in use, you receive a "no license found" error when launching Mastercam.

1. Install Mastercam.

2. Install the TCP/IP network protocol, if it is not already installed.

3. Run NHaspX. It is located in the Start menu, Mastercam Licensing Utilities folder.

4. Set Mode to Network.
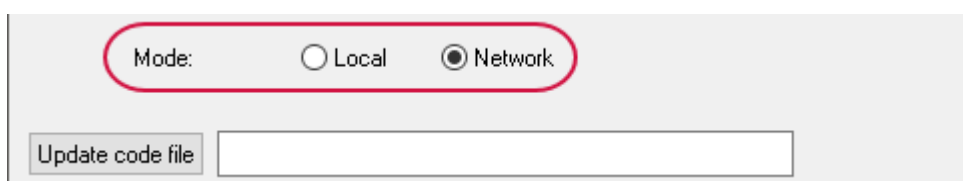
5. From the Mastercam installation's support folder, copy the nethasp.ini file to your desktop.

6. Use your preferred text editor to edit the nethasp.ini file for the appropriate network protocol and identify the computer that is 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 20xx\Mastercam.

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

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.
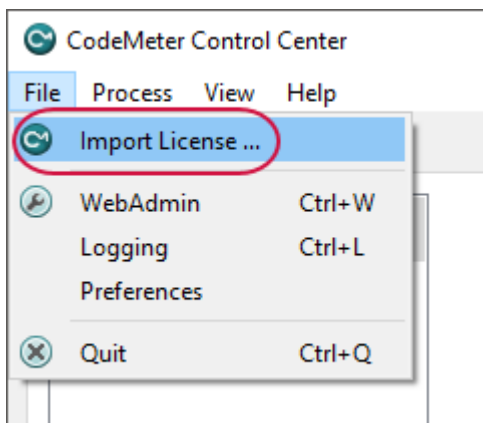
> 📄 **NOTE**
> If you are installing Mastercam Mill-Turn as a fully software-based license, refer to the Activation Wizard Help instead. Select **Start**, **Mastercam Licensing Utilities**, **Activation Wizard Help**.

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**.

   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 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 "Setting Up a Network" in the Activation Wizard Help (Start, Mastercam Licensing Utilities, Activation Wizard Help) for instructions on how to enable the CodeMeter server and to configure the client systems to see the license.

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

Software License Monitoring

This document does not cover monitoring a software license. For information on software licensing, refer to the Activation Wizard help. Select Start, Mastercam Licensing Utilities, Activation Wizard Help.

NetHASP Monitoring

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

NHaspX Utility

To 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 checked-out licenses 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 into the NetHASP server. To install the Aladdin Monitor, run the Mastercam installation program from the Mastercam installation media, choose Utilities, and then NetHASP Monitor, and follow the instructions. If you have a valid log-in, these utilities are also available for download on the myMastercam website.

Aladdin Monitor is a third-party application for monitoring NetHASP usage and is included with Mastercam for your convenience. However, CNC Software, LLC can provide only limited support for this application. Contact Thales Group for technical support issues.

Following is a basic workflow for 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	49	Port Expert
5	Mill 3D	24	CoroPlus	50	Blade Expert
6	Lathe Entry	28	ProDrill	53	Probing
7	Lathe	29	STEP Read	56	CATIA V5 with PMI
8	Wire	31	Engraving	60	Mill-Turn
9	Design	32	Curve 5-axis/Drill 5-axis		
10	Solids	37	ProE/Creo Read		
11	Router Entry	40	CATIA V5 Read		
12	Router	41	CATIA V5 Write		

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		UDP	897254

Using Mastercam Licenses Remotely

You may want to use Mastercam outside of work, such as from a home office. The procedure for remote use depends on license type. See the following knowledge base articles for instructions on using each license type. For information on license types, refer back to "Introduction" on page 5. For information on license types, refer back to "Before You Begin" on page 1.

> 📄 **NOTE**
> You will be asked to log in to your myMastercam account when accessing the following links.

Using a Hardware License Remotely

I have a...

- Purple USB HASP (FAQ 50720)
- Red USB NetHASP (FAQ 50721)

Using a Software License Remotely

I have a...

- Single seat software license (FAQ 50722)
- Network software license (FAQ 50723)

Software License Borrowing

You can also borrow Mastercam software licenses from your workplace network. License borrowing allows you to use the license without access to the network or the internet. For more information about license borrowing, refer to the License Borrow Utility help. Select Start, Mastercam Licensing Utilities, License Borrow Utility Help.

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 licenses.

Updating Software Licenses

This document does not cover updating software licenses. For information on software licensing, refer to the Activation Wizard help. Select Start, Mastercam Licensing Utilities, Activation Wizard Help.

Updating Hardware Licenses

You must update your Mastercam licensing hardware (HASP or NetHASP) with an update code obtained from your Reseller or CNC Software, LLC Customer Service. This needs to be done when you install or upgrade to a new release of Mastercam.

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

- Included in your Mastercam 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**
> 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. Select **Start**, **Mastercam Licensing Utilities**, **Hasp X**.

    b. If Mastercam is not installed on the server, download the NetHASP Update Utility from the myMastercam website.

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.
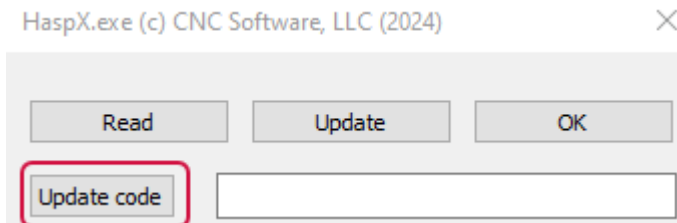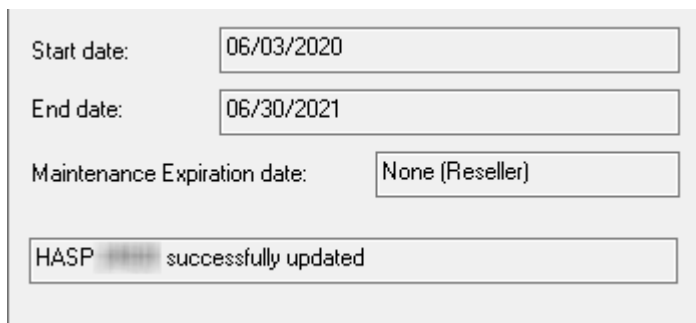
    b. If you received the update code as a string of numbers, enter the code into the text box indicated below. The code must be entered in exactly as it was received, including spaces and dashes.
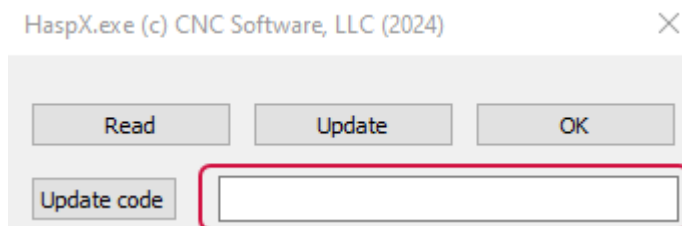
3. Select **Update**. HaspX updates the license and displays the products (including any newly activated products) that the license supports.

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

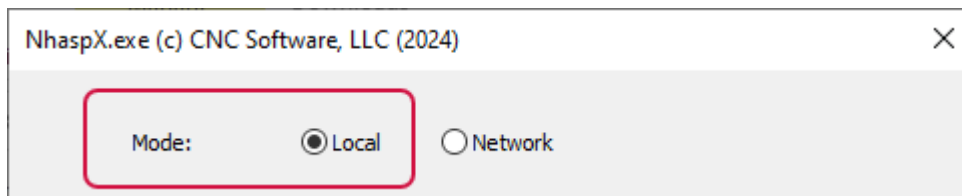5. Click OK to exit the HaspX dialog box.

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.

1. Choose one of the following methods to run NHaspX.exe.

    a. Select Start, Mastercam Licensing Utilities, NHaspX.

    b. If Mastercam is not installed on the server, download the HASPX drivers from the myMastercam website.

2. 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.

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

> 📄 **NOTE**
>
> Keep a record of the serial number in the event that you need to contact Technical Support at CNC Software, LLC 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 Mastercam

Use the procedures below to update Mastercam to the latest version. Note that updating Mastercam does not mean that your maintenance agreement supports the updated version. Check that your maintenance and maintenance date required for the update match.

> 📄 **NOTE**
>
> If you encounter issues with your Mastercam update, please 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 myMastercam website, 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.

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.

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.

> **NOTE**
> Mastercam 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 making the necessary modifications.

Setting Registry Options

To run Mastercam, you need permission to read from the following registry key. This key is created when Mastercam is first installed. This includes global settings for all users during their first time running Mastercam.

HKEY_LOCAL_MACHINE\SOFTWARE\CNC Software

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

HKEY_CURRENT_USER\SOFTWARE\CNC Software

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

> 📄 **NOTE**
>
> The registry key for versions of Mastercam before 2024 is HKEY_LOCAL_MACHINE\SOFTWARE\CNC Software, Inc.\

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.
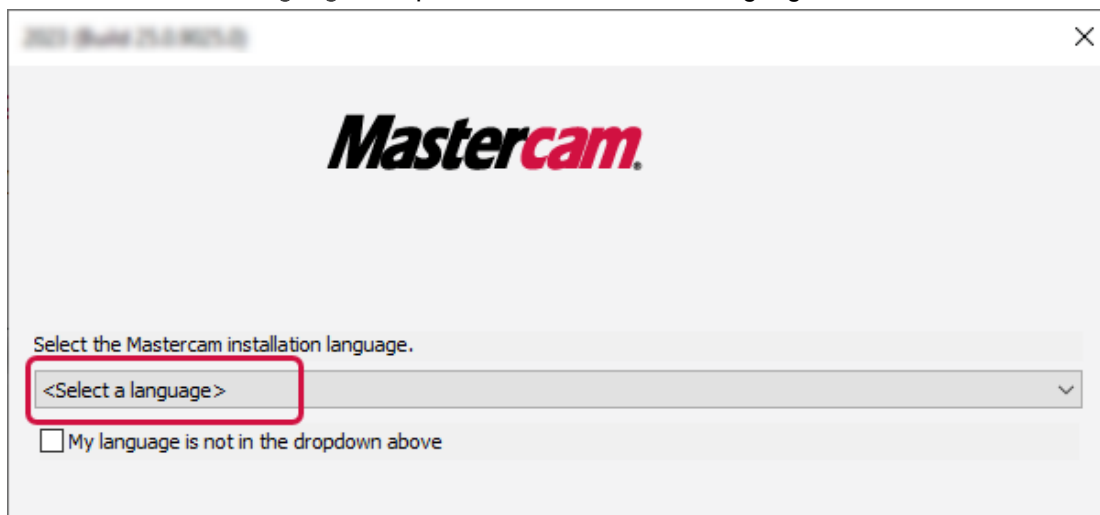
Changing language packs

After installing Mastercam, if you need to change the language, follow this procedure:

1. Run your Mastercam installer.

2. Choose the Modify option, and click Next.
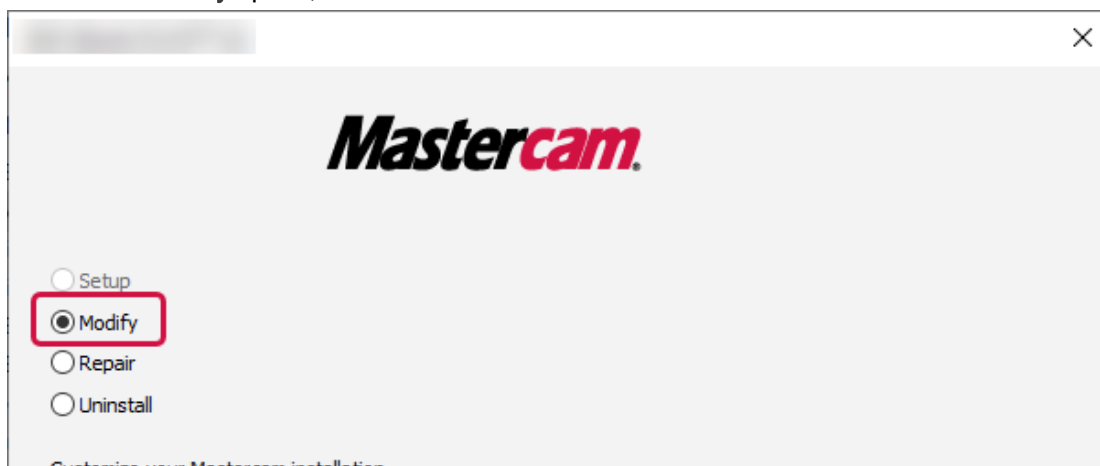
3. From the **<Select a language>** drop-down, choose the new language.

NOTE

If your language is not available in the drop-down, select **My language is not in the dropdown above**. The dialog box will then display instructions on how to proceed.

4. Click **Next**. Mastercam installs the selected language pack.

5. When Mastercam shows the setup as complete, click **Exit**.
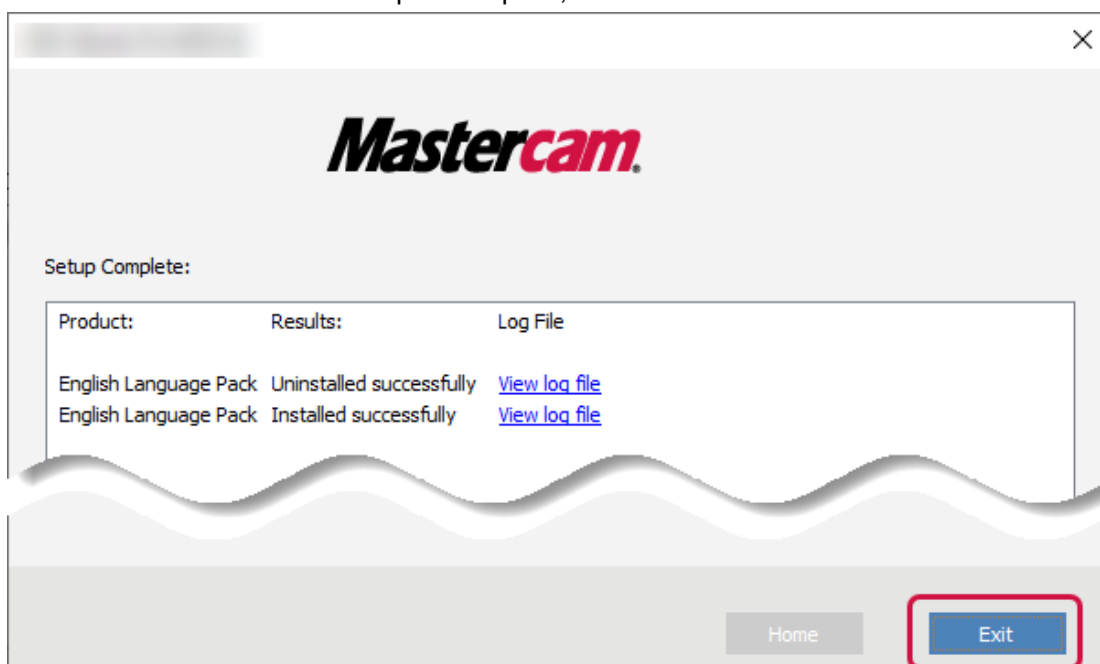
Troubleshooting

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 or visit Mastercam's website for Technical Support.

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 installation.

1. Launch the Mastercam installation from the USB drive or from an installation file downloaded from the myMastercam website.

2. Select Repair, and follow the instructions.

Reinstalling NetHASP/HASP Drivers

Mastercam 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.

Select Hasp Setup from the Mastercam Licensing Utilities Start menu folder, 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.

No Mastercam license found.
A Mastercam license was not detected during startup. You must activate your software license or troubleshoot why the system does not recognize the license type that it should run from.

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.

Connection to the Mastercam license has been lost. Mastercam will be 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 USB 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. However, in some cases the license can be restored if the only change is a new hard drive. To try and restore the license, run the Activation Wizard on the system after the hard drive has been replaced.

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.

Only Mastercam retail network software licenses can be borrowed using the Mastercam License Borrow Utility. For more information about license borrowing, refer to the License Borrow Utility help. Select Start, Mastercam Licensing Utilities, License Borrow Utility Help.

If the original computer host is lost, stolen, or damaged, the lost, stolen or damaged license policy is applied to acquire a new license. In some cases running the Activation Wizard again may restore their license.

Can a software license be passed to a remote computer that is disconnected from a network?
No. However, you can use the License Borrow Utility to borrow a license and then disconnect from the network.

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.
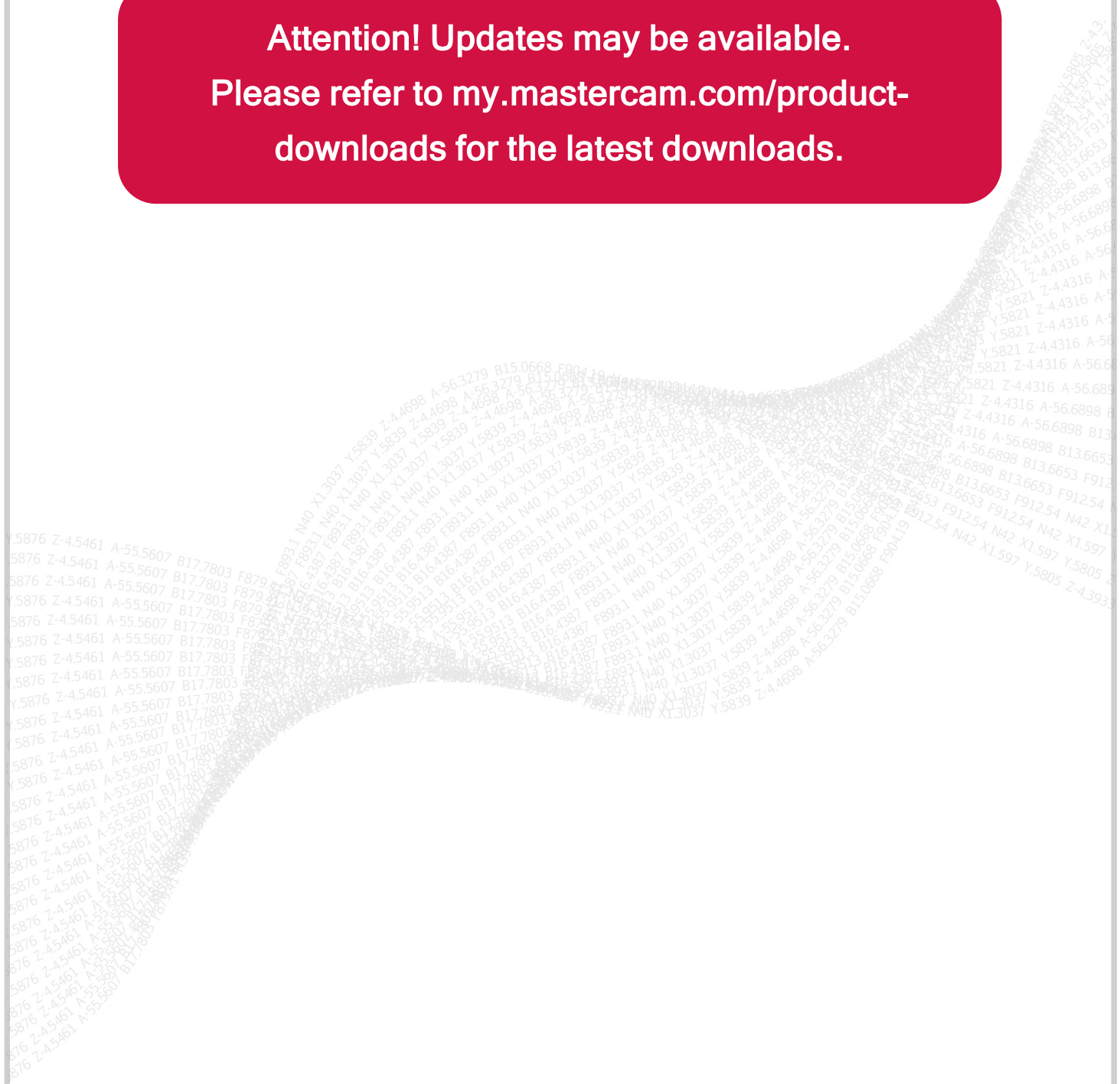
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