

# SpaceClaim plugin for MasterCAM

## Overview

SpaceClaim has created a plugin for Mastercam that allows geometry transfer back and forth between the two products. This is beneficial for SpaceClaim customers looking for a CAM solution and Mastercam customers looking for a powerful geometry editing and preparation tool.

Cost: Free

## Version support

SpaceClaim versions supported: SC 2017.0 and later

Mastercam versions supported: X9 and later

## Functionality

After installing the SpaceClaim addin in Mastercam there will be a new toolbar with an “Export to SpaceClaim” button and an “Import from SpaceClaim” button:



The **Export to SpaceClaim** button can be used to send models having one or more solids to SpaceClaim. This will start a new SpaceClaim session and load the model. However, if SpaceClaim is already running, it will open the model in a new design window. Solids and surfaces in Mastercam can be exported using this plugin.

The **Import from SpaceClaim** button can be used in Mastercam to receive models from SpaceClaim. This will import the active design from the current SpaceClaim session. The model will be imported in the same Mastercam design window. Remember, SpaceClaim should already be running when using the import functionality. Solids and surfaces in SpaceClaim can be imported into Mastercam and will retain their colors. Assemblies will be flattened when transferred.

## Install procedure for Mastercam

1. Right click on the MCAM\_Installer.zip file downloaded from the SpaceClaim website and go to Properties. At the bottom of the General tab, click on the Unblock button, if it is present, and then click OK.

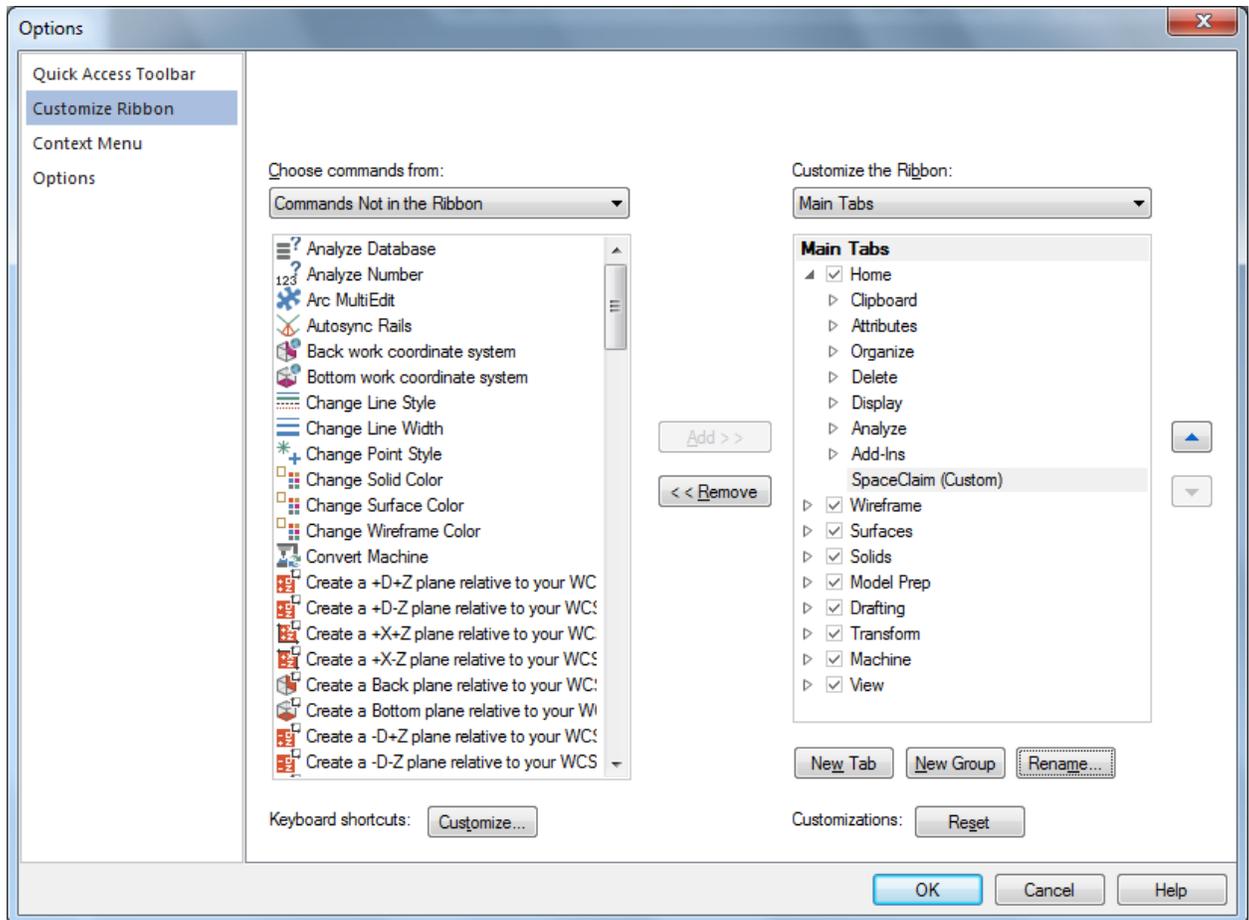


2. Extract the files from MCAM\_Installer.zip file and navigate to the zip file containing the correct Mastercam version files for 32 or 64 bit installation. Then extract it.
3. Copy the three dlls, config and ft file shown below into the following locations:

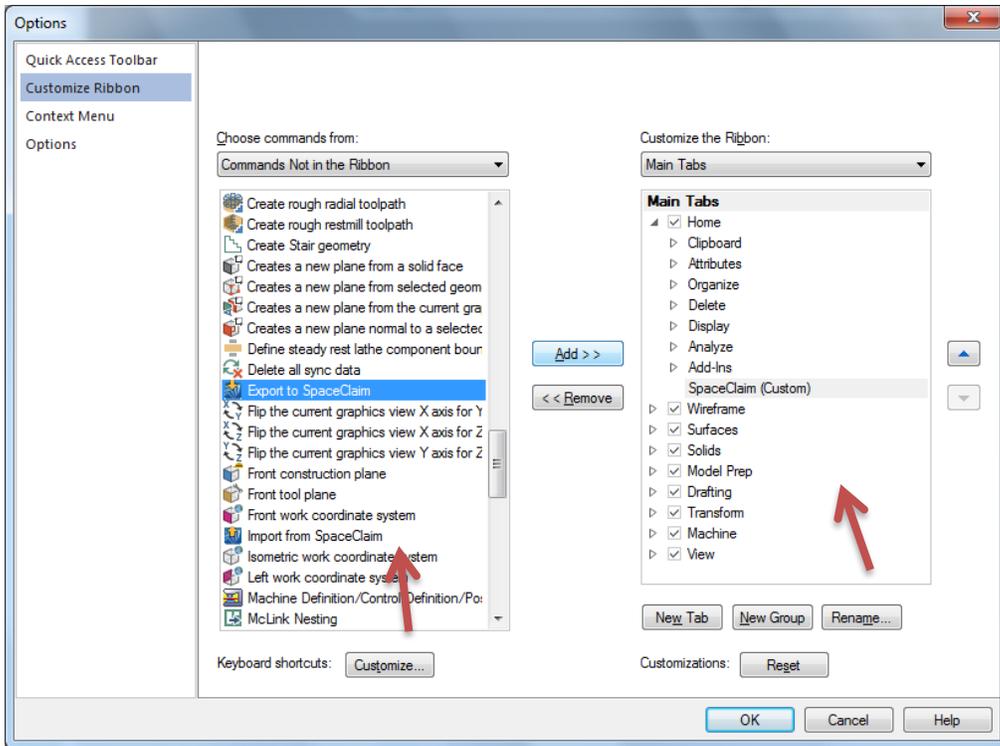
```
{mastercam install directory}\chooks\SpaceClaim\MastercamSpaceClaimPlugIn.9.0.dll  
{mastercam install directory}\chooks\SpaceClaim\SpaceClaimAddInBridge.dll  
{mastercam install directory}\chooks\SpaceClaim\SpaceClaimPlugInBase.dll  
{mastercam install directory}\chooks\SpaceClaim\SpaceClaimAddInBridge.dll.config  
{mastercam install directory}\chooks\MastercamSpaceClaimPlugIn.9.0.ft
```

You will need to manually create the SpaceClaim folder in the Mastercam hooks directory.

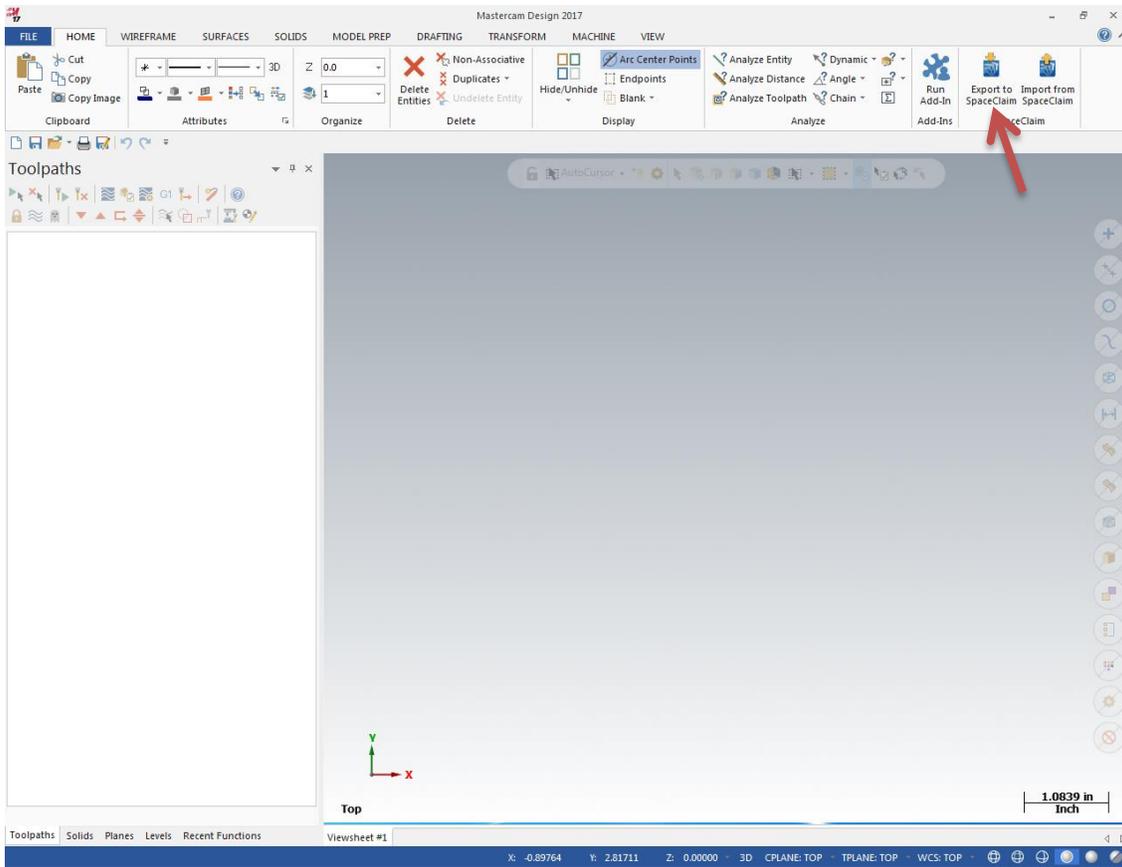
- Right click on each of the above files and select 'Properties'. Double check that they are not blocked. If they are, unblock them using the same method as in Step 1.
- For MasterCAM 2017 and later, Go to File>Options>Customize Ribbon  
For MasterCAM X9 and before, Go to Settings>Customize> Toolbars. Category: NETHook.  
Toolbars: New toolbar.



- For MasterCAM 2017 and later, create a New Group and Rename it. Drag the SpaceClaim import/export icons onto the new toolbar and Click OK.  
For MasterCAM X9 and before, Add the SpaceClaim import/export icons into the new toolbar and Click OK



7. Close and re-launch Mastercam. The new toolbar should appear with the SpaceClaim tools on it.



## Configuring the Plugin

Models will be transferred between Mastercam and SpaceClaim in the SAB format by default. The import and export formats can be controlled using the SpaceClaimAddInBridge.exe.config file.

The possible configuration option values are as follows:

Option Name	Option value	Required SpaceClaim Translator License
FromSpaceClaimFormat / ToSpaceClaimFormat	AcisBinary	Engineer
	ParasolidBinary	Data Exchange II
	STEP	Engineer

Open this file in a text editor, change the value as desired.

```
<?xml version="1.0" encoding="utf-8" ?>
<configuration>
  <configSections>
    <sectionGroup name="userSettings"
type="System.Configuration.UserSettingsGroup, System, Version=4.0.0.0,
Culture=neutral, PublicKeyToken=b77a5c561934e089" >
      <section name="SpaceClaimAddInBridge.Properties.Settings"
type="System.Configuration.ClientSettingsSection, System, Version=4.0.0.0,
Culture=neutral, PublicKeyToken=b77a5c561934e089"
allowExeDefinition="MachineToLocalUser" requirePermission="false" />
    </sectionGroup>
  </configSections>
  <userSettings>
    <SpaceClaimAddInBridge.Properties.Settings>
      <setting name="Setting" serializeAs="String">
        <value />
      </setting>
      <setting name="FromSpaceClaimFormat" serializeAs="String">
        <value>AcisBinary</value>
      </setting>
      <setting name="ToSpaceClaimFormat" serializeAs="String">
        <value>AcisBinary</value>
      </setting>
    </SpaceClaimAddInBridge.Properties.Settings>
  </userSettings>
</configuration>
```

### Note

1. Acis and STEP formats transfer Solids and Surfaces between Mastercam and SpaceClaim.
2. Parasolid translator offers higher quality of data transfer but limited to solids only.