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## What's New in CAMWorks Nesting 2014

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Click a link below or use the bookmarks on the left.

### Contents

- [What's New in CAMWorks Nesting 2014 SP 1.0](#)
  - [Supported Platforms](#)
  - [Automatic loading of Nested parts in Part Manager and Stock in Stock Manager](#)
  
- [What's New in CAMWorks Nesting 2014 SP 0.1](#)
  - [Supported Platforms](#)
  - [Bug Fixes in CAMWorks Nesting 2014 SP 0.1](#)
  
- [What's New in CAMWorks Nesting 2014 SP 0.0](#)
  - [Supported Platforms](#)
  - [30 Day Evaluation License](#)
  - [CAMWorks Command Manager](#)
  - [Nesting with Multiple Tool Heads](#)
  - [Unfolding Imported Sheet Metal Bodies](#)
  - [Saving Nested Layout Output in .dxf format](#)
  - [Assigning Quantity to Assembly instead of constituent parts](#)
  - [Selectively Unfolding Sheet Metal Bodies](#)
  - [Stamp Feature Unfold Option](#)

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# What's New in CAMWorks Nesting 2014 SP 1.0

## Supported Platforms

<b>Solid Modeler</b>	SOLIDWORKS 2014, CAMWorks Solids 2014. (Both 32-bit and 64-bit) SOLIDWORKS 2013, CAMWorks Solids 2013. (Both 32-bit and 64-bit)
<b>Operating System (32-bit)</b>	Windows Vista Ultimate, Business, and Enterprise editions. Windows 7 Professional, Ultimate and Enterprise editions.
<b>Operating System (64-bit)</b>	Windows Vista Ultimate, Business, and Enterprise editions. Windows 7 Professional, Ultimate and Enterprise editions.

## New – Automatic loading of nested parts in Part Manager and stock in Stock Manager

<b>Purpose:</b>	<p>This is a new functionality for CAMWorks Nesting users who also use the CAMWorks application. (CAMWorks is used to generate NC codes for the nested layouts generated by CAMWorks Nesting.) This functionality links CAMWorks Nesting with CAMWorks.</p> <p>After nested layouts are generated, they will be automatically listed under <i>CAMWorks Configurations</i>. The parts present in each nested layout will be listed in the <i>CAMWorks Part Manager</i> and the common stock for each nested layout will be automatically defined in the <i>CAMWorks Stock Manager</i>. This automation saves considerable time.</p>
<b>Implementation:</b>	<p>In previous versions of CAMWorks Nesting, after the nested layouts were generated, users had to manually select parts present in each nested layout and add it to the <i>CAMWorks Part Manager</i>. The settings for the common stock too had to be manually defined. These steps were time-consuming.</p> <p>From <i>CAMWorks Nesting 2014 SP1</i>, the steps for adding parts to the Part Manager and defining the stock can be automated using this new functionality.</p> <p><b>How it works:</b></p> <ol style="list-style-type: none"> <li>When nested layouts are generated using <i>CAMWorks Nesting</i>, the application checks for the presence of the <i>CAMWorks Add-In</i>.</li> <li>If the <i>CAMWorks Add-In</i> is detected, the nested layouts will be listed in the <i>CAMWorks Configurations Manager</i>.</li> <li>The parts (instances) present in each nested layout (configuration) will be automatically listed in the <i>CAMWorks Part Manager</i>.</li> <li>Users can delete unwanted parts listed in the <i>Part Manager</i> using the <i>Delete</i> option.</li> <li>In the <i>CAMWorks Stock Manager</i>, a common stock will be automatically defined for the parts present in each nested layout (configuration).</li> </ol>

	<p><b>Note:</b></p> <ul style="list-style-type: none"><li>- The default settings for enabling/disabling this functionality is controlled from the initialization file named <b><i>Default.ini</i></b> using the flag <i>AddPartsToCWManager</i>. By default, this functionality is enabled.</li><li>- This functionality will not work for nested layouts which were created either with the functionality disabled or using an earlier version of CAMWorks Nesting. Users need to regenerate the nested layouts once again (with the functionality enabled) in order for it to work.</li></ul>
<b>Tutorial:</b>	To learn how to use this functionality, refer <i>Tutorial 12 – Generating NC Code for Nested Layouts using CAMWorks</i> .

# What's New in CAMWorks Nesting 2014 SP 0.1

## Supported Platforms

Supported Platforms	
<b>Solid Modeler</b>	SOLIDWORKS 2014, CAMWorks Solids 2014. (Both 32-bit and 64-bit) SOLIDWORKS 2013, CAMWorks Solids 2013. (Both 32-bit and 64-bit) SOLIDWORKS 2012, CAMWorks Solids 2012. (Both 32-bit and 64-bit)
<b>Operating System (32-bit)</b>	Windows Vista Ultimate, Business, and Enterprise editions. Windows 7 Professional, Ultimate and Enterprise editions.
<b>Operating System (64-bit)</b>	Windows Vista Ultimate, Business, and Enterprise editions. Windows 7 Professional, Ultimate and Enterprise editions.

## Bug Fixes in CAMWorks Nesting 2014 SP0.1

The **CAMWorks Nesting 2014 SP0.1** version has been released with the intent of resolving the following issues/software errors reported by CAMWorks Nesting users:

1.	<b>Creating Nesting Job from SolidWorks Multi Body parts having two bodies:</b> Though the nesting job was completed successfully, when the user further processed the resultant nesting assembly using CAMWorks, the Perimeter Feature Recognition wouldn't happen correctly.
2.	<b>Different names for the same software application:</b> The name of the software product as displayed in its installer was different from its name listed in the Windows Control Panel. This created a lot of confusion for the users. This anomaly has been corrected. The naming convention used for the CAMWorks Nesting application will indicate its Version and Service Pack number. However, note that the Service Pack number will not be indicated when viewing CAMWorks Nesting in the list of SolidWorks Add-Ins.
3.	<b>Incompatibility with SolidWorks 2012:</b> CAMWorks Nesting 2014 SP0 was not compatible with SolidWorks 2012. Consequently, users with the SolidWorks 2012 CAD software couldn't use the CAMWorks Nesting 2014 SP0 application. This issue has been resolved and now CAMWorks Nesting 2014 SP0.1 will run as an Add-In within SolidWorks 2012.
4.	<b>Error while Uninstalling:</b> This was an error observed only by those users who tried to load CAMWorks Nesting 2014 SP0 as an Add-In within SolidWorks 2012. When such a user tried uninstalling the CAMWorks Nesting application, the application would get uninstalled successfully but the warning message <i>Self Registration Error</i> was continuously displayed. This error was observed since CAMWorks Nesting .dll files weren't getting registered correctly. This issue now stands resolved as CAMWorks Nesting is now compatible with SolidWorks 2012.
5.	<b>'Create separate assembly option':</b> While executing a 'Create Nesting Job' command for certain specific parts, if the <i>Create Separate Assembly</i> option is selected, then CAMWorks Nesting crashes.
6.	<b>'Save Output as dxf' option:</b> While executing a 'Create Nesting Job' command for specific parts, if the 'Save output as dxf' option is selected, then SolidWorks crashes.

# What's New in CAMWorks Nesting 2014 SP 0.0

## Supported Platforms

Supported Platforms for 32-bit	
<b>Solid Modeler</b>	The 32 bit version of: SOLIDWORKS 2014, CAMWorks Solids 2014, SOLIDWORKS 2013, CAMWorks Solids 2013, SOLIDWORKS 2012, CAMWorks Solids 2012, SOLIDWORKS 2011, CAMWorks Solids 2011, SOLIDWORKS 2010, CAMWorks Solids 2010.
<b>Operating System</b>	Windows Vista Ultimate, Business, and Enterprise editions (32-bit version), Windows 7 Professional, Ultimate and Enterprise editions (32-bit version). <b>Please note that CAMWorks Nesting 2014 is not supported on Windows XP OS.</b>

Supported Platforms for 64-bit	
<b>Solid Modeler</b>	The 64 bit version of: SOLIDWORKS 2014, CAMWorks Solids 2014, SOLIDWORKS 2013, CAMWorks Solids 2013, SOLIDWORKS 2012, CAMWorks Solids 2012, SOLIDWORKS 2011, CAMWorks Solids 2011, SOLIDWORKS 2010, CAMWorks Solids 2010.
<b>Operating System</b>	Windows Vista Ultimate, Business, and Enterprise editions (64-bit version); Windows 7 Professional, Ultimate and Enterprise editions (64-bit version). <b>Please note that CAMWorks Nesting 2014 is not supported on Windows XP OS.</b>

## New – 30-Day Evaluation License

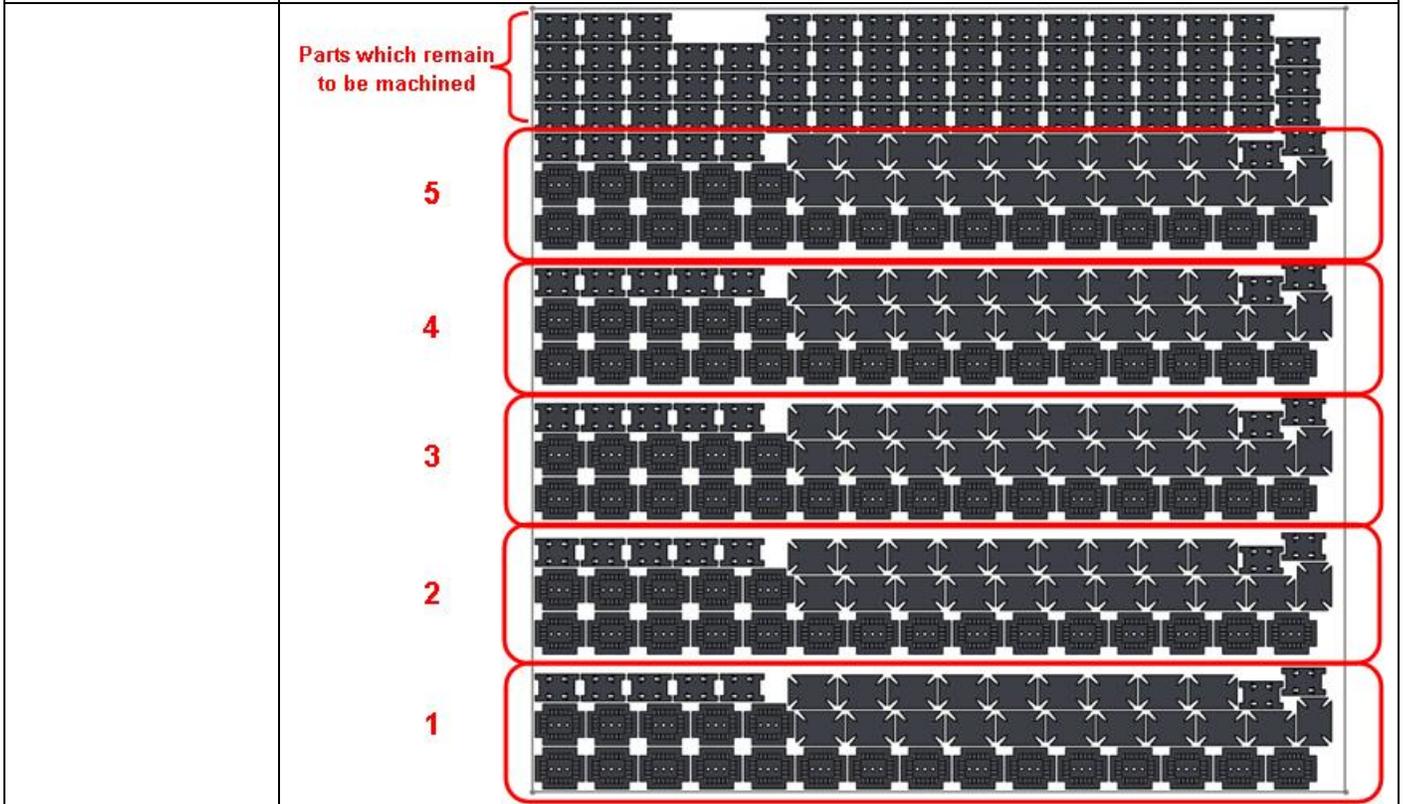
<b>Purpose:</b>	Enables running of the CAMWorks Nesting application for first-time users for a period of 30 days from the date of installation.
<b>Implementation:</b>	When you run CAMWorks Nesting for the first time, CAMWorks Nesting will automatically activate an Evaluation License from the current date for a duration of 30 days if a permanent license is not detected on your system. Once this license expires, you need to purchase a permanent license from an authorized CAMWorks Reseller to continue using CAMWorks Nesting.

**New – CAMWorks Nesting Command Manager (Ribbon Bar)**

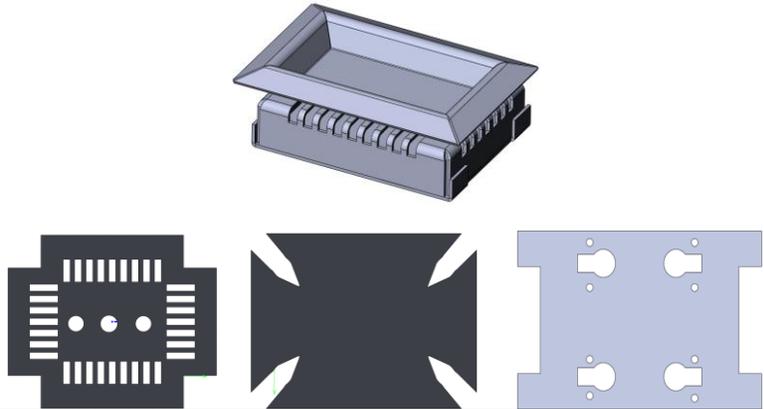
<b>Purpose:</b>	Provides graphic access to all major commands of CAMWorks Nesting.
<b>Implementation:</b>	The graphics buttons provided in the CAMWorks Nesting Command Manager provides access to all major commands of CAMWorks Nesting. This Command Manager serves as an alternative to the CAMWorks Nesting menu for accessing major commands. It can be customized for menu options, display settings, keyboard shortcuts, mouse gestures etc.

**New – Nesting with Multiple Tool Heads**

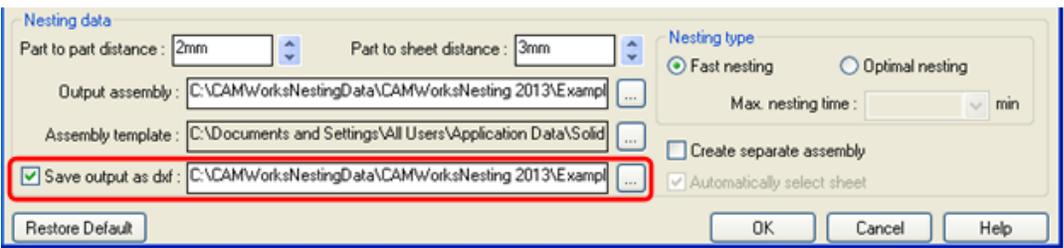
<b>Purpose:</b>	An optional feature that enables users to nest two or more identical nesting layouts in a single sheet using multiple tool heads.
<b>Implementation:</b>	The default settings for enabling/disabling this feature is controlled from a new initialization file named 'Machine.ini'. The interactive interface to edit the parameters associated with nesting with multiple tool heads is provided in the form of <i>Multi Head Options</i> tab in the <i>Create Nesting Job</i> dialog.
<b>Tutorial:</b>	To learn how to use this functionality, refer <i>Tutorial 6 – Nesting with Multiple Tool Heads</i> in the <i>CAMWorks Nesting User Guide &amp; Tutorials</i> document.



**New – Unfolding Imported Sheet Metal Bodies**

<p><b>Purpose:</b></p>	<p>Enables the unfolding of Imported Sheet Metal parts containing bends.</p>
<p><b>Implementation:</b></p>	<p>To facilitate the unfolding of imported sheet metal parts, CAMWorks Nesting provides the 'Unfold Imported Bodies' dialog which can be accessed using the 'Intelligent Unfold' and 'Unfold All Parts' commands. This dialog allows you to selectively unfold sheet metal parts with bends and assign parameters associated with unfolding sheet metal parts. The 'Unfold All Parts' command can be used to both native as well as imported sheet metal parts. Imported bodies containing faulty surfaces too can be unfolded by selectively choosing desired faces on the sheet metal part for unfolding.</p>
<p><b>Tutorial:</b></p>	<p>To learn how to use this functionality, refer <i>Tutorial 7</i> and <i>Tutorial 8</i> in the <i>CAMWorks Nesting User Guide &amp; Tutorials</i> document.</p>
	

**New – Save Nested Layout Output as DXF File**

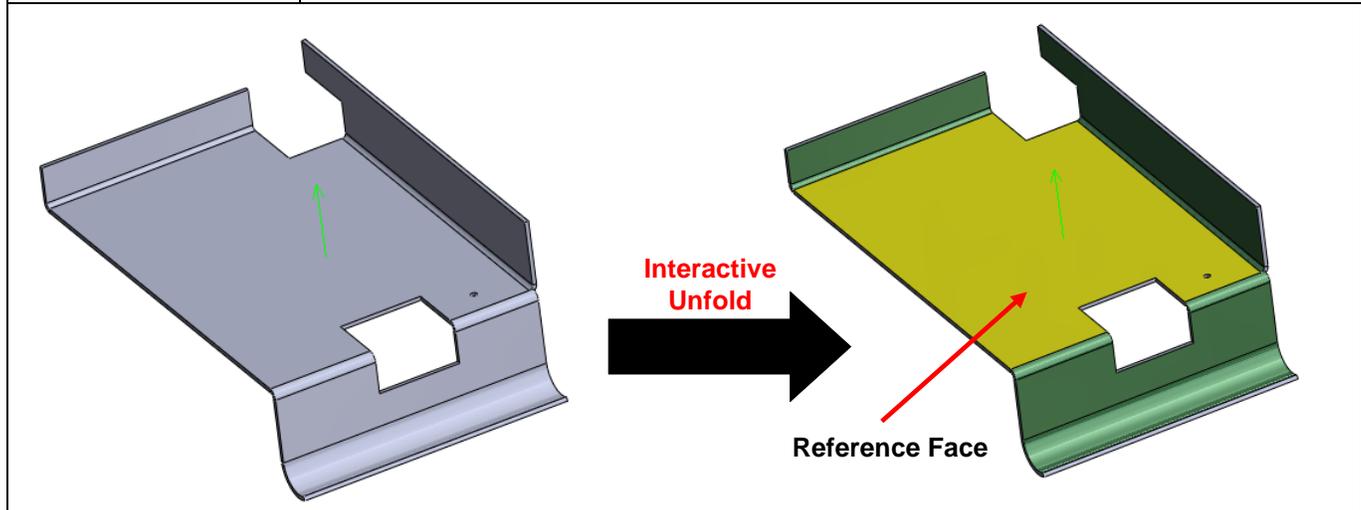
<p><b>Purpose:</b></p>	<p>An optional feature provided in CAMWorks Nesting now allows users to save the nested layouts in the internationally accepted CAD data file format known as 'Drawing Exchange Format' (.dxf), in addition to the existing assembly file format (.sldasm).</p>
<p><b>Implementation:</b></p>	<p>A checkbox option 'Save Output as dxf' is provided in the <i>Nesting data</i> group box of the <i>Create Nesting Job</i> dialog. Users can specify the folder location where the output is to be saved.</p>
	

**New – Feature for Assigning Quantities to the Assembly to be nested instead of its constituent parts**

<b>Purpose:</b>	Facilitates automatic assignment of quantity values to the parts of the assembly being nested.
<b>How it works:</b>	Assigning quantity to the assembly being nested automatically updates the quantities of its constituent parts.
<b>Implementation:</b>	<p><b>Enabling this feature:</b> To enable this feature, the flag 'ShowAssemblyQuantity' in the initialization file named <i>DefaultValues.ini</i> should be set to '1'.</p> <p><b>When this feature is enabled:</b>                  If an assembly to be nested, then the assembly, its constituent parts, sub-assemblies as well as the parts comprising these sub-assemblies will be listed in the <i>Part Data</i> tab in the <i>Create Nesting Job</i> dialog. When the user assigns a quantity to the parent assembly or any of the sub-assemblies, then the quantities of their comprising parts will be automatically updated in the <i>Part Data</i> tab. Thus, the need to assign quantity values to individual parts of the assembly is eliminated.</p> <p><b>Note:</b> Users can overwrite these automatically assigned quantity values of the individual parts by assigning user-defined quantity values.</p> <p><b>When this feature is disabled:</b>                  If an assembly is to be nested, only the parts comprising the assembly will be listed in the <i>Part Data</i> tab of the <i>Create Nesting Job</i> dialog. (Sub-assemblies will not be listed but parts comprising the sub-assembly will be listed). The user has to assign quantity values to individual parts in order to nest those parts.</p>
<b>Tutorial:</b>	To learn how to use this functionality, refer <i>Tutorial 9 – Assigning Assembly Quantities</i> in the <i>CAMWorks Nesting User Guide &amp; Tutorials</i> document.

**New – Selectively Unfolding Sheet Metal Bodies using 'Interactive Unfold' dialog**

<p><b>Purpose:</b></p>	<p>Enables the user to selectively unfold sheet metal parts with bends before nesting the parts and assign parameters associated with unfolding sheet metal parts. Both native and imported sheet metal parts can be unfolded using this command.</p>
<p><b>Implementation:</b></p>	<p>To facilitate Interactive Unfolding, one surface of the part to be unfolded is designated as the reference face. By default, this reference face is the face with the largest surface area (highlighted in <b>yellow color</b> when the <i>Interactive Unfold</i> dialog is open).</p> <p><i>Interactive unfold</i> command also allows the user to change the default reference face and select/deselect the faces to be unfolded when so required.</p> <p><b>Selecting Faces to Unfold when 'Chain Faces' option is enabled</b>                  When the <i>Chain Faces</i> option is enabled, all faces tangential to the reference face are automatically selected for unfolding (Highlighted in <b>green color</b> in the graphics area). Faces connected to the reference face via such a selected face are also selected for unfolding.</p> <p><b>Selecting Faces to Unfold when 'Chain Faces' option is disabled</b>                  When the <i>Chain Faces</i> option is disabled, user needs to manually select the faces to be unfolded. The faces thus selected will be highlighted in <b>green color</b> in the graphics area).</p> <p>When the reference face and selected faces form a single face chain, the part can be unfolded.</p> <p><b>Unfolding faulty parts:</b>                  Imported or native parts containing faulty surfaces too can be unfolded by selectively choosing desired faces for unfolding on the sheet metal part.</p>
<p><b>Tutorial:</b></p>	<p>To learn how to use this functionality, refer <i>Tutorial 10</i> in the <i>CAMWorks Nesting User Guide &amp; Tutorials</i> document.</p>



**New – Stamp Feature Unfold Option**

<p><b>Purpose:</b></p>	<p>Allows to control the display of stamp features on a part after the part has been unfolded. Based on the settings, the stamp feature may be retained, patched or ignored. This setting is applicable to both native as well as imported parts.</p>
<p><b>Implementation:</b></p>	<p><b>Enabling this feature:</b> The settings for the display options for stamp features is controlled by through the flag <i>'StampFeatureUnfoldingOption'</i> in the initialization file named <i>DefaultValues.ini</i> . Values are assigned to this flag to control settings.</p> <ul style="list-style-type: none"> <li>i. <b>0:</b> Assigning the value '0' ensures that the stamp feature is <b>retained</b> after the part is unfolded. (This is the default setting at the time of installation.)</li> <li>ii. <b>1:</b> When the value '1' is assigned to this flag, the stamp feature is <b>patched</b> with a flat planar surface after the part is unfolded.</li> <li>iii. <b>2:</b> When the value '2' is assigned to this flag, the stamp feature is <b>ignored</b> after the part is unfolded. The area covered by the stamp feature is replaced with a hole.</li> </ul> <p>The setting for the stamp feature option take effect after the part is unfolded using one of the Unfold commands.</p>
<p><b>Tutorial:</b></p>	<p>To learn how to use this functionality, refer <i>Tutorial 11</i> in the <i>CAMWorks Nesting User Guide &amp; Tutorials</i> document.</p>

