



# 3DSYSTEMS®

## SLA® Systems Software Customer Release Notes

### 3DManage™ Software

Version 1.5.5438, Part Number 23782-C01-18

Release Date: May 10<sup>th</sup> 2017

*For all Viper™ SLA® Systems*

*For all iPro™ SLA® Centers*

*For all ProJet® 6000-series Production 3D Printers*

*For all ProJet® 7000-series Production 3D Printers*

*For all ProX™ 950-series Production 3D Printers*

*For all ProX™ 800-series Production 3D Printers*

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## 2.0 Software Release Overview

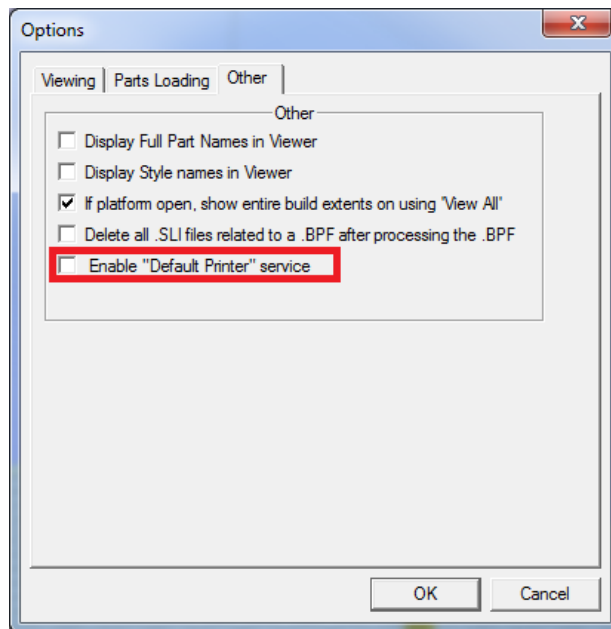
### 2.1 About 3DManage™ 1.5.5438

- Bug Fixes:

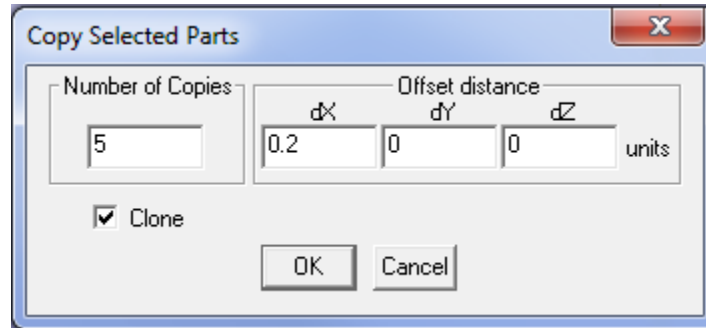
- Creating vents for Quickcast build styles now works correctly, the issue causing software crashes has been resolved.
- Linewidth Compensation and Machine Platform creation overhauled to improve overall reliability.

- Feature Additions:

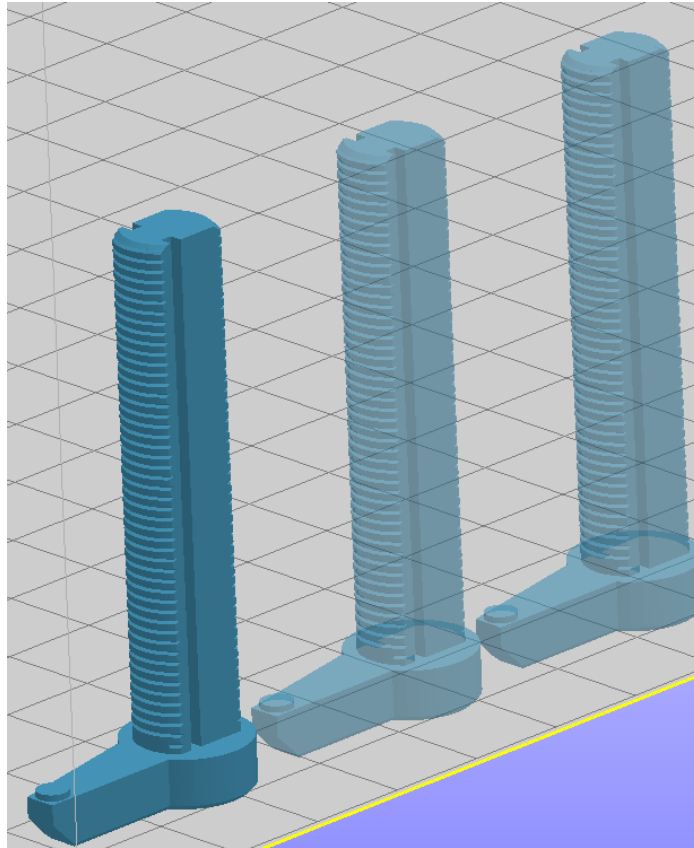
- New remote status feature added for ProX printers.
  - Remote status feature available for ProX printers running v1.0.3447 (and above) control code.
- Remote status feature improved for ProJet printers running v1.6.2846 (and above) control code.
  - Printers running control code older than v1.6.2736 will continue to utilize the previous HTML remote status window.
- “Send to Default Printer” feature can now be toggled on and off.
  - Option is located under Tools -> Options in the “Other” tab.



- When Parts are copied, the user is now given the option to utilize clones. When using clones only the original part is sliced. Saving valuable part preparation time.

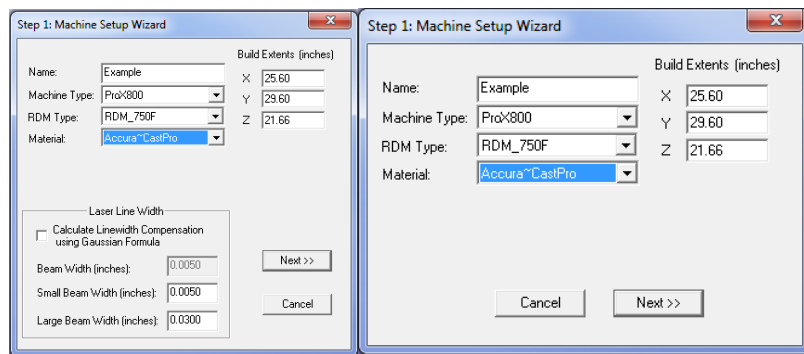


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- Copies, or “Clones”, will be shadows of the original STL and will not be sliced during part preparation. Clones will appear transparent and share build style characteristics with the original.

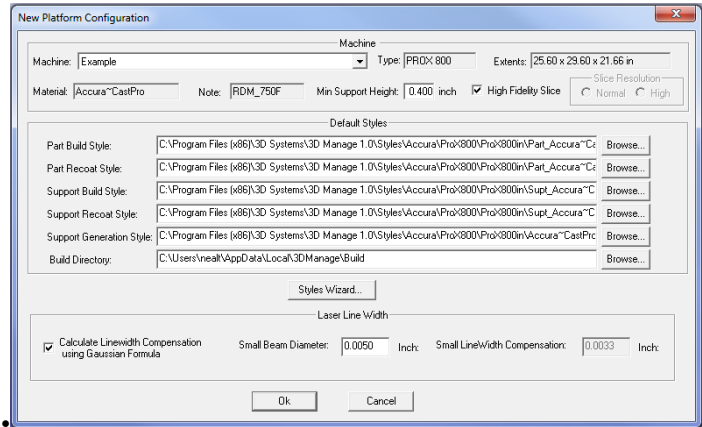
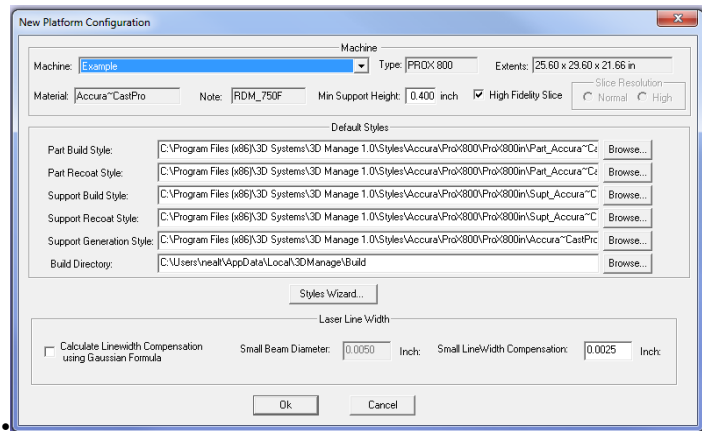


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- Clones have a few limitations that need to be kept in mind while in use:

- Clones cannot be edited or changed, all custom settings need to be applied to the original **prior** to cloning. **These settings would include custom supports, vents and drains, etc...**
  
- Build and Inf directories have been moved to C:\Users\Local User\AppData\3DManage
  - This was done to conform to Windows standards and eliminate permissions issues.
  
- Linewidth Compensation and offsets have been reworked to streamline the platform creation process and change confusing field labels.
  - Old Machines.inf set up files are **no longer compatible**. Your machine platforms will need to be remade. This is to ensure that saved values are secured.
    - New machines.inf files are saved under:
      - C:\Users\local user\AppData\Local\3DManage\Inf
  
  - Large Beam Width options removed as this parameter is not machine specific and its description was not true to the actual software function. This feature is now correctly labeled Small/Large Offset and can only be set within the edit build style function.
  
  - “Small Beam Width” label removed. This field has been replaced by the Small Linewidth Compensation field. This was done so that this number equals the value in the part build style. Moving forward we have removed all reference to the beam width and all values will be set using a compensation value (Beam Width = full measured line width, the compensation value = 1/2 full measured line width).
  
  - Linewidth and Beam Diameter settings moved to the end of the Platform Setup Wizard process.



- Linewidth parameters used to be located on **this screen**. The parameters have been moved to the **final screen** in the wizard process.
  
- To simplify the platform setup process, the user may now modify only one value to setup the proper compensation values. As shown in the examples below, when the Gaussian formula option is unused the user will enter the Small linewidth compensation value directly. When the Gaussian method is utilized the compensation value will be calculated based on the users measured beam diameter (standard value of 0.005”). To obtain this diameter value, you may profile your beam using the Printhead operation menu of your machine. Please refer to the user guide for full instructions.



- To further improve the accuracy of any prepared build, extra checks have been added to ensure that proper Small/Large offset values are used. Along with this change the default style installation directory has been made read-only.
  - To save style edits the user should save the styles to a different directory outside of the C:\Program Files\ file path.

### 2.2 3DManage™ Minimum Computer Requirements

- Processor: Pentium 4, 2.4 GHz

Note: The faster the processor, the faster 3DManage™ can prepare (i.e. – slice) a platform of geometries. Personal computers available today generally have multicore processors. The most important part of picking out a system, in terms of slice, is that the faster each individual core speed, the better (i.e. – 3.0GHz is better than 2.4GHz). Also, more cores does not necessarily increase slice productivity. If you have a choice between a Dual Core 3.0 GHz processor and a Quad Core 2.4 GHz processor, go with the Dual Core processor.

- Installed Memory: 2GB

Note: The amount of installed memory (i.e. – RAM) directly correlates to how many triangles can be loaded into a platform. Each geometry loaded is created with a certain number of interlocking triangles; the more triangles in the geometry, the larger the individual geometry size. \*\* The “/3GB Switch” (referenced in section 3.6) only helps if you have a 32bit system with 4GB of RAM installed. The reasoning behind utilizing this tool is that Windows will allocate a certain amount of the installed memory to control / run the Operating System. The “/3GB Switch” limits the amount of installed memory that can be used for the Operating System there by increasing the amount of memory available to all other open programs. to set this switch follow the instructions found in the “Setting the /3GB Switch” section.

- Video Card: Open GL 1.4, 128 MB of graphics memory, Native PCI Express x16 bus interface (Recommended: 1280 X 1024 resolution or higher)
- Windows 7 or higher.
  - Windows XP is not supported in this release.

## 3.0 Installation Instructions

### 3.1 Step 1: Acquiring the 3DManage™ Software License

1. Record your ProJet® series, iPro™ series, ProX™ series, and/or Viper® Pro Machine's serial number. This can be found on the machine ID plate which is centered at the bottom of the machine's rear facing side.
2. On your local application computer (i.e. – not your SLA Machine!), retrieve and record your local machine's HostID (i.e. – Physical Address). The following steps instruct you on how to acquire this value:
  - a) On the taskbar, click START and then select RUN.
  - b) Type cmd and then click OK.
  - c) In the command (dos) window, type ipconfig /all <enter>
  - d) Record the “physical address” value under the Local Area Connection.
    - The value is a 12 digit hexadecimal number.
3. Open an internet browser and go to the 3DSystems Software Service page (<http://softwarelicensing.3dsystems.com/content/software/licensing/index.aspx>)
4. Fill in the boxes under the Technical Contact Information section with your contact information
5. Select 3DManage™ under the Request a 3DManage™ License section
6. Click the submit button.
7. On the next screen, enter your HostID address (i.e. – Physical Address) and the SLA serial number found on your SLA.
8. Click the submit button.

9. Your license file will be e-mailed to you shortly.

- a) **Note:** If you are having licensing issues, contact our US hotline at 800-793-3669 or your local regional office.

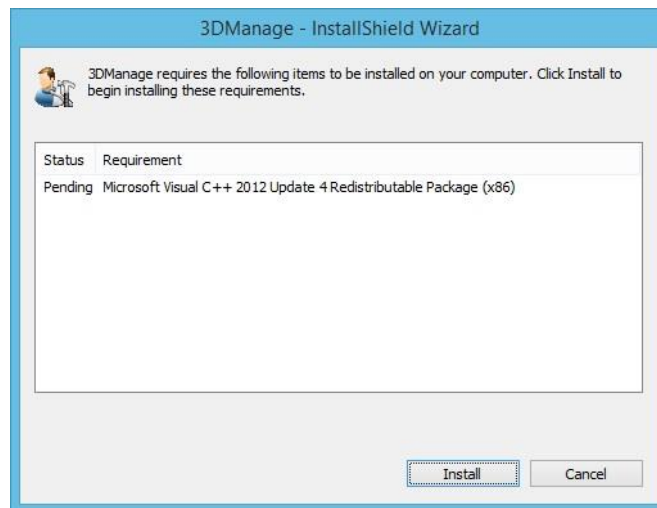
### 3.2 Step 2: Acquiring the 3DManage™ software update

1. Available via customer web portal: <http://Support.3dsystems.com>

### 3.3 Step 3: Installing 3DManage™

**Note:** The instructions below can be used when installing for either Microsoft Windows 7.0 or Windows 8.0; Failure to follow these instructions may result in numerous errors.

1. Go to C:\Program Files (x86)\3D Systems
  - a) It is suggested that for this latest version you do not back up your inf files as they may interact negatively with the new structure.
  - b) In the Builds folder, save any BFF files that you wish to keep into a directory outside of the 3D Manage folder.
  - c) In the license folder please save your license.ini file to a directory outside of the 3D Manage folder.
  - d) In the Stls folder, save any stl files that have been added or modified to a directory outside of the 3D Manage folder.
  - e) Go to Control Panel -> Add or Remove Programs -> Select 3D Manage
  - f) Uninstall 3D Manage
  - g) Delete the entire 3D Manage directory
2. Run the EXE setup file associated with the latest version of 3D Manage
3. Follow the installation wizard prompts.



- a) **Note**—The Microsoft redistributable installation may fail if you already have it installed. To continue, select yes when prompted.



4. After installation is complete, move the backup files back into their respective directories.

### 3.4 Step 4: Setting Up Windows 7.0, and 8.0 Permissions

**Note:** You must have administrative permissions to perform the following steps successfully!

1. Open the C:\Program Files folder
2. Right Click on the 3D Systems folder
3. Select Properties
4. In the 3D Systems Properties window, select the "Security" tab.
5. In the "Group or user names:" window, select "Creator Owner", then click "Edit".
6. In the "Permissions for 3D Systems" window, make sure that all of your "Group or user names" have the same permissions.
  - a) You will want to select a Group or User Name and check "Allow" for all of the permissions.
  - b) After you finish with one Group or User Name, click the "Apply" button.
  - c) Then proceed to the next user until ALL of the Users have the same permissions.
  - d) After all Users have been given full permissions, click "OK" to return to the 3D Systems Properties window.
7. In the 3D Systems Properties window, click "OK" to close the window.

**Note:** After clicking Apply for the Creator Owner user, the Allow checkboxes will deselect. For all other owners the selected checkboxes will remain after clicking apply.

### 3.5 Step 5: Modifying System Memory Handling (optional)

- Setting 3GB Switch (x32 bit Operating System)
  - **Note:** This section is only a recommendation for users wishing to maximize the capabilities of a 32-Bit operating system with 4GB of memory (RAM) installed.
  - **Note:** The "/3GB Switch" is required because windows will allocate a certain amount of the installed memory to control the Operating System. The "/3GB Switch" limits the amount of installed memory that can be used for the Operating System there by increasing the amount of memory available to all other open programs. To set this switch follow the instructions found in the "Setting the /3GB Switch" section.
- a) Install 4GB of memory (RAM) into the system that 3DManage™ will be installed on.

Note: It is recommended that users use two – 2GB memory chips
- b) Right Click on My Computer.
- c) Click properties
- d) Click on the Advanced tab
- e) In the Startup and Recovery section, click on the Settings button
- f) This will open the Boot.ini file.
- g) Prior to making any changes, create a backup of the Boot.ini file by clicking File...Save As. Save the file as Boot-orig.ini In the boot.ini file, add /3GB to the end of the operating systems string.
- h) Save the boot.ini file
  - **Note:** Make sure you are saving your changes to the Boot.ini not the backup file that you created earlier.
- i) System will require a reboot for these changes to take effect.



### 4.0 Known Issues

#### 4.1 Known Bug List

1. **Support generation and Slicing/Build Preparation in High and Extremely High memory modes may cause application failure. This will be resolved in an upcoming patch.**
2. User cannot abort build submissions by using "Abort" button.
  - a. User may close window by pressing X button.
3. 3D Manage may have difficulty slicing large quantities of parts while in standard memory mode. If the user runs into "Out of Memory" errors the user may need to switch into high or extremely high memory estimation mode.
4. If user presses "Cancel" during the machine setup wizard, the platform will be created regardless.
  - a. User must go to Edit Machine Properties and delete the false platform.
  - b. The platform needs to be deleted because no other platforms will be allowed to use the same name and in most cases the platform will have no style files associated with it.
5. When creating a **user defined** platform using metric (mm) styles. The minimum support height field will say "Inches" instead of "mm" but it will require a number in metric units. For instance if you create a user defined platform with mm styles you need to type "10.2" into the minimum support height field even though it says "inches." If you use a number lower than this (0.4 for example, the default inch value) you will receive an error message that this value is out of the acceptable range.
6. If the user generates too many clones they will be prompted that they need to delete some for them to fit on the platform appropriately. If this prompt is accepted 3D Manage will delete the master part instead of just the excess clones. To work around this, decline the prompt and delete the clones manually.
7. Help topics are missing and will generate an error when accessed.
8. 3mf files are not saved with the proper extension. The user should add the .3mf extension to any stls saved as 3mf.
9. There is no warning message for moving mirrored parts that do not have supports.
  - a. The workflow requires that the user generate supports prior to mirroring and moving the mirrored part. Best practice is to generate supports, mirror part, and then move parts where desired.
10. When changing the number of sweeps in the recoat style, the user should select the number from the drop down box. Entering a number with the keyboard is invalid and will generate incorrect values.
11. Part rendering is not changed to build extents when dragging / moving parts.
12. In some windows environments the check box option to launch 3D Manage after installation may not operate correctly.
13. If user attempts to add a ProJet printer that is offline they will be prompted for a user name and password indefinitely for as long as the machine remains offline.
  - a. Machines that are added to the printer manager while they're online will not show this behavior when brought offline. This only happens when adding machines that do not already exist within the printer manager.
14. Parts must be selected for the verify feature. Unselected parts will not be verified, even if "All" is selected.
15. Sometimes the support editor may fail to open if the user attempts to open outside of Isometric view (Left, Right, etc..). When this occurs, it is best to close 3D Manage and re-load the part and supports in isometric view before opening the support editor.