

Farm It Plug-in v1.5 For DAZ Studio 4.9 4.10 & 4.11



Updated on 21/10/2015

Updated: 14th February 2019

Allows you to overwriting of images, Switch off auto start, Puts off-line network-hard-drive back online. Allows animation-timeline-range to change.

Updated: 13th January 2017

Allows you to open the files first before rendering, will not reopen unless the scene file has change.

About:

Create your very own rendering farm & reduce animation rendering waiting times. Speed up the viewport by culling. Good for creating films and sprite animation in games, *see the new sprite-it plug-in for creating sprite-sheets.*






New Features

Strip-rendering, render a single image using more than one computer.


















Key Features:

- Reduce animation rendering times by adding more computers to the render.
- Automatically switch off all computers when rendering has finished (*Image Series Only*).
- Automatically join in rendering when another computer has been switch on.
- Load, renders and save each frame to same folder.
- CPU-cooling-control-slider for hot weather and over clock computers. (Network Speed)
- Delay timer for plug-ins that set up after a frame has changed. (Frame Update Delay)
- Small object culling, speed up the view-port and rendering.
- No over-writing of images.
- Strip-render, render a single image using more than one computer.
- Will not open the same scene-file, if the scene-file has been changed it will open. **New**




Network Rendering Main Controls

-  Start rendering all frames from starting-frame to ending-frame.
-  Start strip-rendering, render a single image using all computers on the rendering farm.
-  Find servers, adds computers to the rendering farm, if another server has been switch on late, it will join in the render.
-  Stop rendering, can only be used the host computer has finish the render.
-  Open all scene file first, but renders nothing. Same file will not reopen again. **New**

Icons Functions:

-  Shutdown all computer when rendering has finished, there will be count-down of 10 before shutdown, press again to cancel. From the panel turns off that computer, this will not start a render. *Note: Shutdown does not work with strip render.*
-  Unlock software for £9.99, you must be online and have a pay-pal account.
-  Network cull, turns off small objects you can't see, same as cull-size-slider.
-  Makes everything invisible in the scene on all computers.
-  Makes everything visible in the scene on all computers.
-  Delete objects that our invisible, take care not to save over the main file! Use for cutting up the main scene in to parts and enhancing that part of the scene. Can reduce render times.
-  Left eye main camera mode.
-  Right eye basic camera offset mode.
-  Stop a single computer from rendering.
-  Fix bad Ids, stops the pop-up warning box that can stop a render.
-  Pick the main network render folder, server must be able to save to this folder, saves typing.
-  View the strip-render-image.
-  Save the strip-render-image. (software must be unlocked to save!)
-  Play all files rendered from-start frame to end-frame, fast hard-drive is required.
-  Show next image, pressing this when rendering will delay the preview for 10 seconds before rendered image can be displayed.
- I-ray tick box, Render using I-ray (function is for strip render only)
-  Add camera to swapping list. When timeline moves the camera will swap, require more than once camera to swap and a different time line location. Adds the camera you looking through!
-  Delete camera swap.

Quick Start:

1. Unlock the software but only on the host computer you need to be online to do this, it is not necessary to unlock all computers just one computer your rendering from.
2. Copy and Save the Generation-X folder to all computers in Daz plug-in folder. You can add Daz3D-Studio shortcut to the start-up folder, your computer will automatically start to render when switch on. Remember to save the scene before rendering if its altered.
3. For best results save all Daz3D-contents files to a SSD drive and name it Z: map the SSD drive on all other computers and name it Z: Use the Content-Directory-Manager to locate the paths & update the database. Remember to change the paths name in the DAZ Install manager.
4. Create a network folder with share permissions set to (Full control, Change, Read) to save the images z:\Network_render
5. Create a network folder with share permissions set to (Full control, Change, Read) to save your Daz3D-scenes z:\Network_Scene
6. 5th Press  to connect all computers to network.
7. 6th Press  render image series  render single image, Starts rendering on all computers.

Thing you must watch out for:

- *The (multiple-ID-warning-box) this will stop the rendering this is rare but can happen.*
- *Using wrong texture path-names, that's why we use a Z: drive rather than C: drive. I put all my graphics on a single shared drive.*
- *File share permission not set to (Full Control, Change, Read). A Server can't save without changing the advance share permission on a hard-drive/folder.*
- *Remember that your network group-name should be the same on all computers, if you have not done this you will have trouble connecting up your computers. (WORKGROUP) or (HOMEGROUP) names is normally used.*
- *Use a fast hard-drive like the MX100/MX200 SSD. For lots of computer and data use NAS Drive.*
- *Daz3D need to optimise texture so its best to use a SSD hard-drive for Microsoft-Windows.*
- *Use a Gigabit network switch rather than a 100 base. Remember some LAN-cables can be 100 change to 1000.*
- *Use same amount or more ram on the network-computers, but never less.*
- *Missing Icons! You must copy the folder named GenerationX and not the folder contents.*
- *In the Render-Settings, Image Path, must be set to a network path with file permissions set.*
- *After change any setting, you must save scene before network rendering.*
- *When a frame changes other plug-ins can start-up, use the delay-slider to delay rendering.*

Render times for one second of animation at 30fps 1024x720, Two lights.

Computer: (DDR3 32GB, AMD9350 8-core CPU) SATA3 MX100 SSD-Hard drives

- One computer 60 to 90 minutes per second (Very bad)
 - Two computers 30 to 45 minutes per second (Not good)
 - Five computers 12 to 18 minutes per second (Good for creating short 15 minute clips)
 - Ten computers 6 to 9 minutes per second (Good for creating 1 to 2 hours films)
 - Twenty computers 3 to 5 minutes per second (Best for creating 1 to 2 hours films)
- If your using lots of computer you should install solar-panels allow one panel for each computer.*

Auto Server Start and Join in:

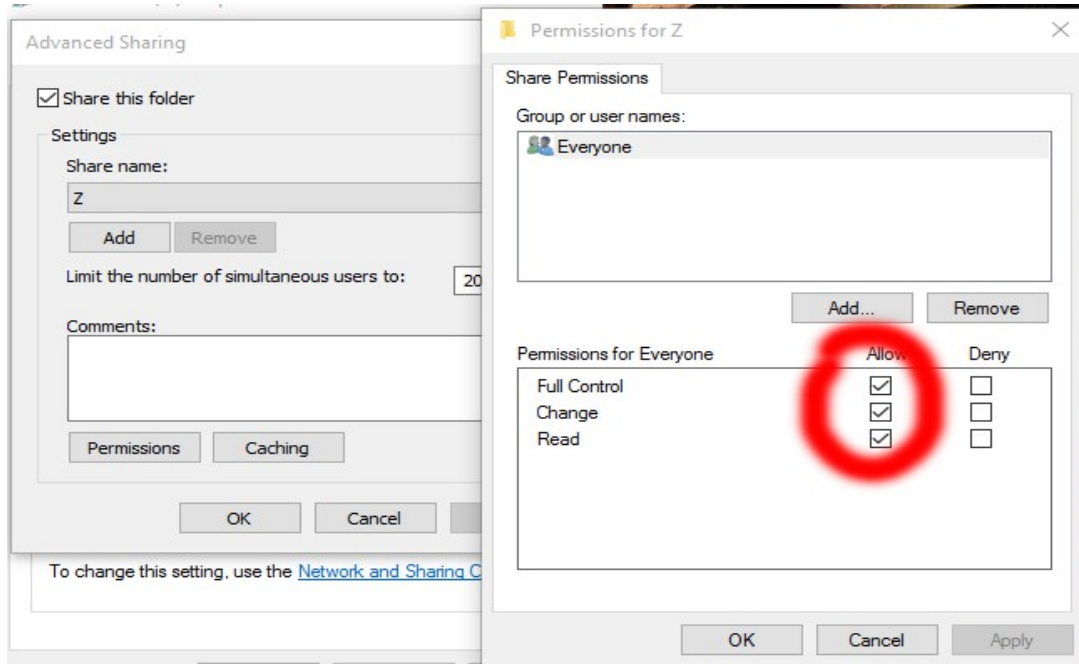
- Set-up your computer so when it starts you don't type in a password, auto login. Watch a you-tube video on how to do this.
- Copy the Daz Studio 4.8 (64-bit) shortcut icon to the start-up menu this will automatically run Daz on start-up, so when your computer is switch on Daz will start.
- You don't need to save the Daz content to the server hard-drive, only one hard-drive is use normally Z: network drive.
- If you have more than one work station you must run the content DB maintenance on each computer, you don't have to do that on each server.
- You must map a shard network Z: drive on all servers and work-stations, normally name drive Z: *Set the share permission (Full Control, Change, Read)*, servers cannot write to a hard-drive with wrong permission set! Using a C: drive as network hard-drive will clash with server C: drive, this is why a Z: drive is used.

Tips:

- When moving a camera try not to render the acceleration.
- View a film and see how they position & move camera, see how they clip.
- Move the camera every 3 to 10 seconds this is called a clip, render each clip at a time.
- Do we really need to see feet!
- Do not use shadow mapping with animation, it can create artifices when light and camera our at a certain angle.
- Install Microsoft-Windows on a SSD hard-drive, server only need a 120gb SSD.
- Install Daz3D-contents on a single network hard-drive normally called a Z:
- Understand the main reason why we use a network Z: drive and not use a network C: drive.
- Understand shared file permission! Remember by default its set to read only.
- Time is money, too slow and you will fail, speed is everything.
- Make sure you have proper equipment before you start.
- Plan everything and write everything down before you start.
- Carry out test.
- Who will distribute and sell you work.
- Buy what you really need rather than what you might need.
- Two monitors our better than one.

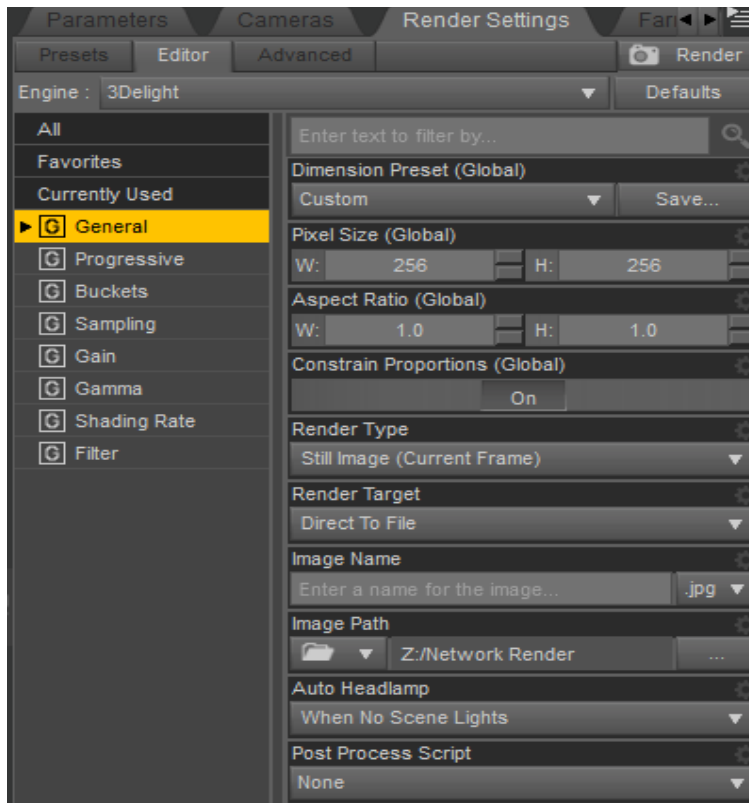
Trouble Shoot: Common errors that people make! Including me :)

Share permissions must be set to (Full Control [tick]), (Change [tick]), (Read [tick]), by default its set only to (Read [tick]). See below.



Render-Settings

The Image path must be to share network path with file permissions set as above. If any file properties change then you must save the scene before rendering. Note: No Image Name



Creating a network Z: drive

Never change the C: drive to drive Z: it must a totally separate hard-drive. After creating a Z: drive share it and set the advance-sharing permission so that every computer can read & write to the Z: drive.

The screenshot shows the Windows Computer Management console, specifically the Disk Management section. A table lists the system's volumes, and a context menu is open over the 'DAZ Studio (Z:)' drive. Hand-drawn callouts provide instructions on how to create and share a network Z: drive.

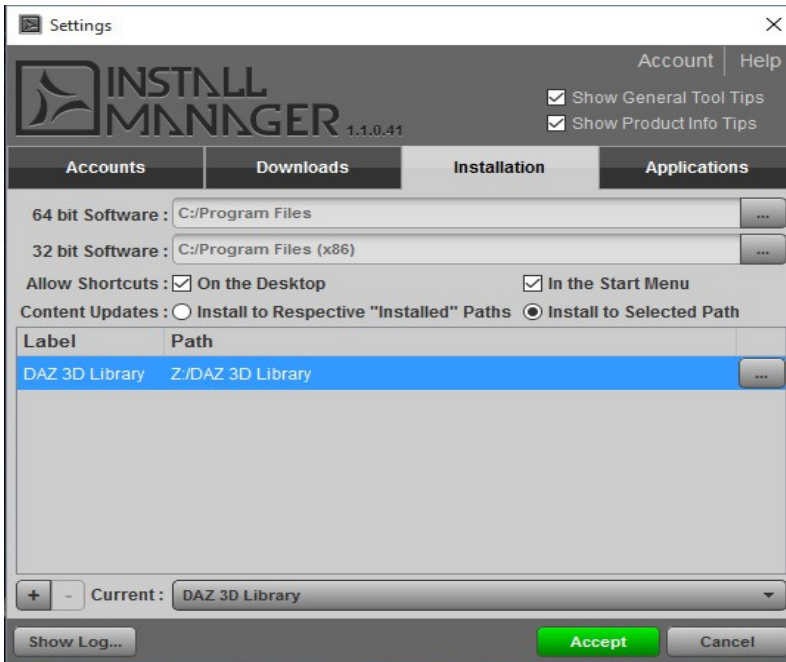
Volume	Layout	Type	File System	Status	Capacity	Free Space	% Free
	Simple	Basic		Healthy (Recovery Partition)	450 MB	450 MB	100 %
	Simple	Basic		Healthy (EFI System Partition)	100 MB	100 MB	100 %
(C:)	Simple	Basic	NTFS	Healthy (Boot, Page File, Crash Dump, Primary Partition)	111.24 GB	42.74 GB	38 %
(D:)	Simple	Basic	NTFS	Healthy (Active, Primary Partition)	238.47 GB	91.42 GB	38 %
250GB (E:)	Simple	Basic	FAT32	Healthy (Primary Partition)	232.82 GB	67.79 GB	29 %
DAZ Studio (Z:)	Simple	Basic	NTFS	Healthy (Primary Partition)	476.94 GB	264.85 GB	56 %

TO CREATE A NETWORK Z: HARDDRIVE

- Buy and install a new SSD hard drive 512GB or 1TB
- If its a new drive. Partition & Format it.
- Change the drive letter to Z: As shown here.
- Share the Z: drive with advance share file permission, Full-Control, Change, Read.
- On all other computer map the Z: drive
- From all other computers you should be able to delete, read and write from it.
- We use a Z: because the file-path-names will be the same on all computers
- If you add another network drive call it X:

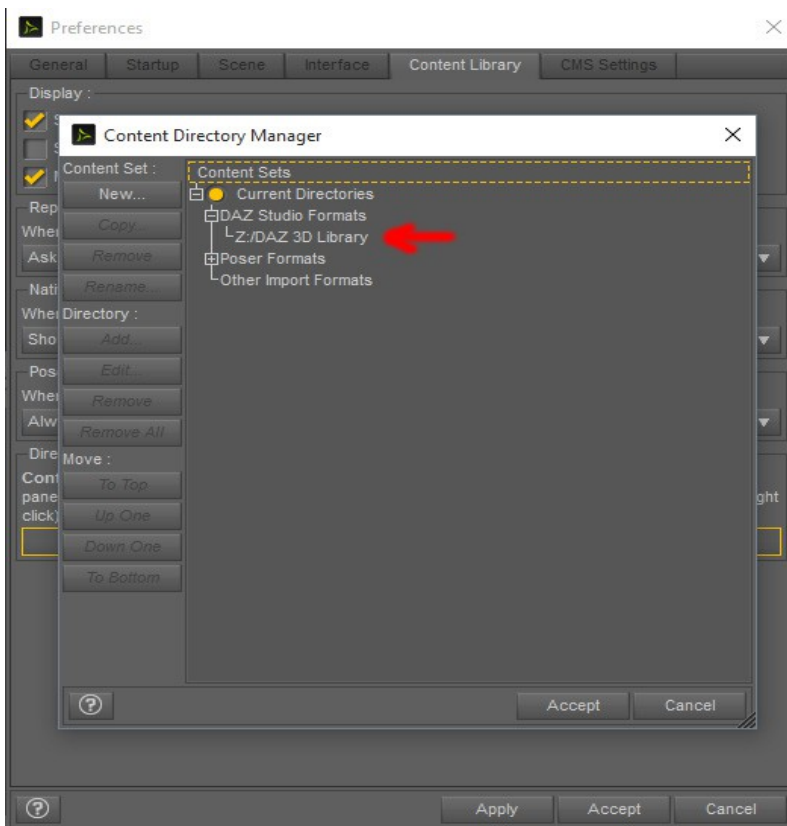
Install-Manager Setting Up

The install manager must be set-up so it will install to your network-z-drive, the download paths names can be anywhere. Note: "Install to Selected Path" is checked.



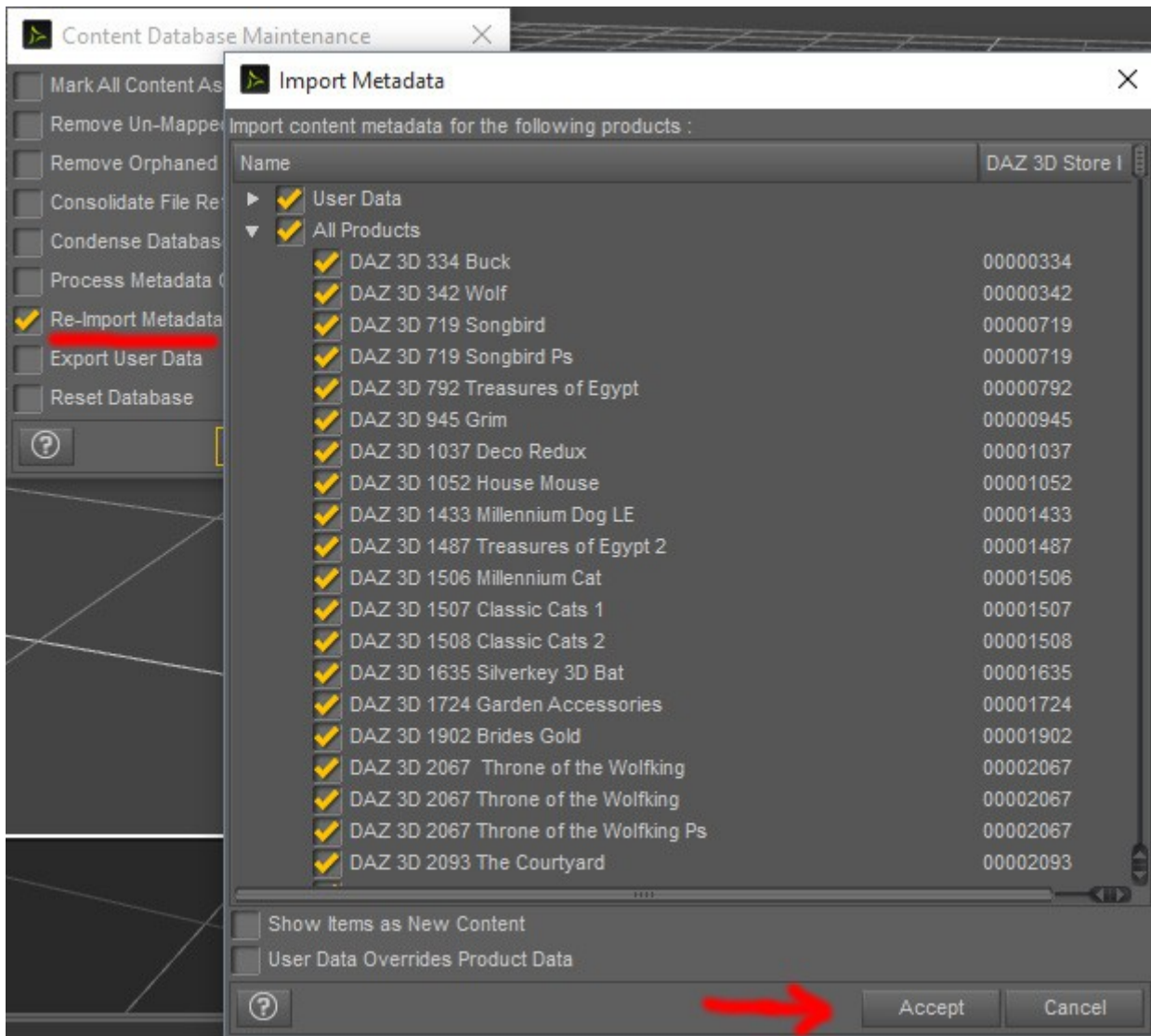
Content-Directory-Manager

The content-directory-manager must have the same path-names as the Install-Manager.



Import Metadata

The Daz3D-contents need to update the database, run it on each work-station, you may need to reset the database.



*If you done all this correctly you have a render farm!
Any problems
email me for help*

Note Farm-It has a limit of 64 computers if you need more just ask. (10 for vista) (20 for windows-7/10) (Up to 200 for NAS Drive)

(C)Right 2015 by D S Martin Updated On 21th October 2015

Trouble Shooting Tips

No other computer found on network why?

The most common reason is an antivirus-software is blocking the port used by FarmIt.dll software. To see if it is the firewall turn all firewalls off temporary! To fix just add to firewall. Farm-it uses port 45454

Remember your router can also can be blocking ports!

The system network group name is not the same, by default its normally called WORKGROUP or HOMEGROUP make sure its the same name!

Find out here: *Control Panel\System and Security\System*

Most people will fail to setup farm-it because of firewalls!

None or missing textures and showing 3D as boxes on server?

The content-directory-manager must have the same path-names as the Install-Manager. Right click on the “Content Library” pane & in the menu open the “Content-Directory-Manager”. Change the path to you shared drive location, normally “Z:/Daz 3D Library”. Remember you only need to install Daz content once and not for each computer!

Server can't save to network drive?

File permission must be set correctly! Check by accessing the network drive from other computer by saving and opening a text file.

Remember, Farm-it will not overwrite a file with the same file-name! Files must be deleted manually, this is a safety feature! You can use the over-writing check box, but you do need to click on each computer don't show message again, when it pops up!

Network hard-drive offline?

A major problem for Farm-It older version.

Farm-It14th Feb 2019 plug-in can now fix off-line hard-drives on slave computers that is sharing the hard-drive. A Microsoft issue that put a red X on network hard-drives at start-up!

Information

Port used is 45454 and no other software should be using that port, you can not change this port!

Farm-it is local network only!

Max number of computer farm-it can handle is 128 using NAS-drive or 20 using just windows 10

Max camera switching is 64. Camera switching is not saved!

Recommend network speed 1000bps check you network-cable is a Cat-5 or better!