## 3D SYSTEMS



# **3DXpert**

# **Getting started**

## Software Installation Setup of Printers/Materials

Tutorial\_V6 - Updated: 14,0000,1587,751



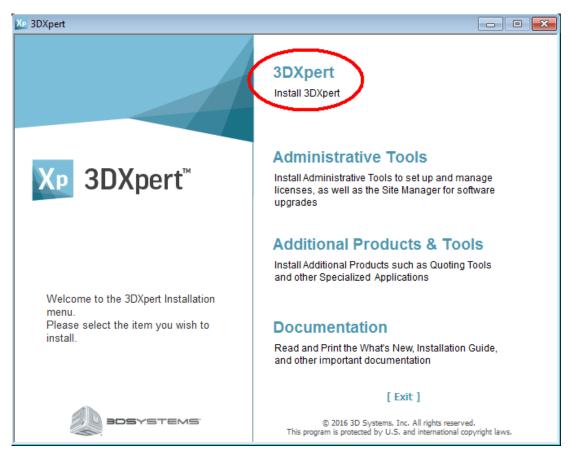
This document describes how to install 3DXpert and how to download, maintain and manage the printer and relevant materials configuration files for your printer.

This document complements the Installation Guide provided with the product.

### Part 1 – 3DXpert Installation

The following steps explain in short how to install 3DXpert itself. The installations of the products available in the Administrative Tools and Additional Products & Tools sections are not discussed here.

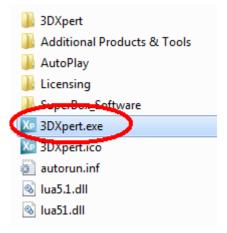
1. Once loading the DVD of 3DXpert on your computer, the following Autorun dialog is launched, allowing you to choose what to install.



Press on "3DXpert"



Note: If the Autorun dialog is not launched automatically, you can also browse the DVD content and double click the file 3DXpert.exe:



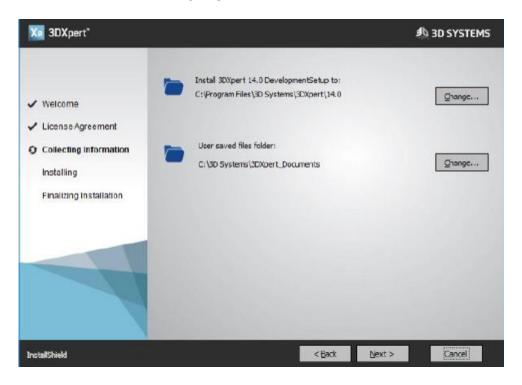
2. In the next page, choose Install (marked in red).

- 🗆 X
3DXpert
Software Installation
» 3DXpert [Install]
» SuperBox (Calculation Seat) [Install]
[Back] [Exit]
© 3D Systems, Inc. All rights reserved. This program is protected by U.S. and international copyright laws.

For additional details about the installation press on '3DXpert Installation Guide' (marked in blue).



3. Click the Next button to proceed with the installation steps. Confirm the license agreement and continue to the following stage:



Through this dialog you can change (by pressing on the "Change" button), if needed, the destination folder of the 3DXpert application itself as well as the default folder for your 3D printing projects.

Press "Next" to start the installation process.

4. Towards the end of the installation process, you are asked to invoke the license manager.

To run with a local license, 3DXpert requires :

- a. A hardware Plug (Dongle) which is connected to the computer.
- b. A matching license file. Save the license file for 3DXpert in a dedicated folder.

If not already done, connect the plug to your computer. When done, press on the "Launch the license Manager" button (marked in red).

Alternatively, 3DXpert can run with a floating license, (for more information see the License

Guide).



As the License Manager launches, press the button (1) and select the folder where your license file (\*.cml) is located.

Press the Save button (2) and close (3) the License manager.

Local License Folder         C:\cimatron_co           Server Address         0.0.0.0	@ 10106		Use Serve	r License		•	2	
Filter By						2		
Product 3DXpert	Version	14	-		Licenses My	Licenses		•
icense	Туре	Nod	Node	PC	Exp. Date	Total	In Use	Remark
🖃 🥼 3DXpert								
🖻 🙀 14								
		Key	02hc		10-feb-2019	4		
Brief PKG_3DXPERT_C(     Brief PKG_3DXPERT_C(					10-feb-2019 10-feb-2019	1		
					10 100 2015	1		

Press the "Finish" button to finalize the setup.

You have now successfully installed 3DXpert.



### Part 2 – 3DXpert Updates

Software updates are available for download on a regular basis.

Such updates can include specific software corrections or larger software upgrades

When an update is available for download, a dedicated message comes up at the start of PC or when launching 3DXpert.

To get the updated, make sure that:

- A 3DXpert plug is connected to your computer and license manager points to a valid license file (\*.cml)) (or you are connected to a license server
- Your computer is connected to the internet.

You can also manually check for updates by using **3DXpert Updates** from the 3DXpert Control panel as shown by the following image:



Note: If you manually run the Update Manager and you do not have a valid license, you will get the following message:

CimatronE Updates - License Error
No valid license has been found. To set a license run the License Manager.
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If an update for your 3DXpert is available, the 3DXpert Updates dialog pops up with various options and information, as shown in the following image:

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👍 3DXpert Updates

#### **3DXpert Updates**

Your 3DXpert version is up to date.

<b>3Dxpert 14.0SP3 14.0300.1476.1113 09-Jan-2018</b> For content details, see What's New 3DXpert_1113.pdf								
Install Now Upo	date Info	Remind Me Later	Don't Install					
Version installed on your PC: 1	14.0100.1592.814							
		Options	View Update History					
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Download the update and follow the instructions of its setup.

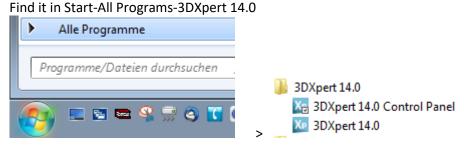
Note: After you update your 3DXpert, the same dialog may pop up again showing a subsequent available update.



### Part 3 – Setting up your Printer and Materials

Once you have a running installation of 3DXpert, you need to download your Printer and Materials configuration files before you can start working. To do that:

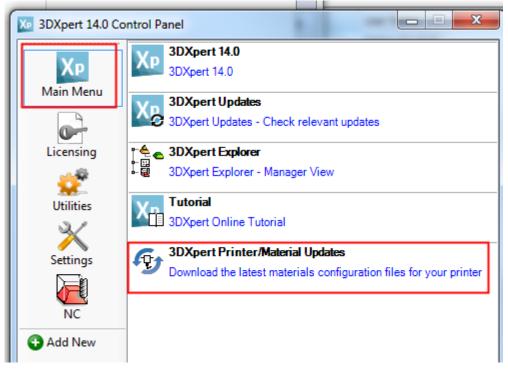
5. Launch the 3DXpert Control Panel.



6. In the Main Menu, click the utility 3DXpert Printer/Material Updates.

This tool enables you to download printers and their relevant materials directly from the 3D Systems download server.

Alternatively, if you have already a printer and its material(s) installed, you can check and download the most updated versions of them.





The first (printer list) **Update Printers & Materials** dialog is displayed, showing the current update status of all installed printers and also a list of printers that have not been installed, but are available for downloading.

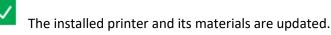
Update Printers & Materials 14.0200						×
3DXpert						
INSTALLED PRINTERS						
			2			
My Printer	ProX DMP 100A	ProX DMP 200A	ProXDM	P 200B	ProX DMP 300A	
			3 Materials	not updated	1 Materials not updated	
NOT - INSTALLED PRINTER	S					•
						^
					Ģ	
EP-M250	MetalFAB1	RenAM 500M	RenAM 5	00Q	SLM 125	
						<b>_</b>
Setting Go to Technology	Folder				Reload	Cancel

The dialog consists of two main printer groups:

- Installed Printers 3D printers installed on your computer.
- Not Installed Printers 3D printers that are not installed on your computer but are available for downloading

For each installed printer, the following specific data is displayed indicating its status:

The installed printer appears on the local computer only - it does not appear in the printer server. Since these printers are local, they have no update status, open printer or download button.



The installed printer and/or its materials are not updated.

For each printer that is not updated, a text indicates if the printer is not updated and/or the number of materials that are not updated (if any).



The installed printer exists on the server, but you do not have a valid license to use it

Database files for other printers are available as well (like EOS, SLM etc...).



Open the printer. This displays detailed information on the specific printer and its installed materials.



Notice that the table displays all the materials available on the web server and if exist, also materials already installed on your 3DXpert.

older:					
B	•	Back to Printer I	list		
te and download:			Version on		a.
	Material Name		Server		Status
				Includes defaults to applicativ	Up to date
					Up to date
		1			Up to date
				/	Download
					Download
					Download
					Download
				\ \	Download
DX DMP 320B	LaserForm Ni / 18 (A)		5		Download
		e and download:  nter Name  X DMP 320B  X DMP 320B  X DMP 320B  X DMP 320B  LaserForm 17-4PH (A)  X DMP 320B  LaserForm 316L (A)  X DMP 320B  LaserForm 316L (A)  X DMP 320B  LaserForm AISi10Mg (A)  X DMP 320B  LaserForm CoCrF75 (A)  X DMP 320B  LaserForm Maraging Steel (A)  X DMP 320B  LaserForm Ni625 (A)	Back to Printer       e and download:       Inter Name     Material Name       X DMP 320B     12       X DMP 320B     12       X DMP 320B     Empty       X DMP 320B     Empty       X DMP 320B     LaserForm 17-4PH (A)       X DMP 320B     Empty       X DMP 320B     LaserForm 316L (A)       X DMP 320B     LaserForm AISI10Mg (A)       X DMP 320B     LaserForm CoCrF75 (A)       X DMP 320B     LaserForm Maraging Steel (A)       X DMP 320B     LaserForm Ni625 (A)	Back to Printer list       e and download:       Inter Name     Material Name     Version Installed     Version on Server       X DMP 320B     12     11       X DMP 320B     LaserForm 17-4PH (A)     5     5       X DMP 320B     Empty     1     1       X DMP 320B     LaserForm 316L (A)     6     5       X DMP 320B     LaserForm 316L (A)     5     5       X DMP 320B     LaserForm AVSi10Mg (A)     5     5       X DMP 320B     LaserForm CoCrF75 (A)     5     5       X DMP 320B     LaserForm Maraging Steel (A)     6     6       X DMP 320B     LaserForm Nif625 (A)     5     5	Back to Printer list         e and download:       Back to Printer list         Inter Name       Material Name       Version Installed       Version on Server       Description         X DMP 320B       12       11       Includes defaults to applicativ         X DMP 320B       LaserForm 17-4PH (A)       5       5         X DMP 320B       Empty       1       1         X DMP 320B       LaserForm 316L (A)       6

Click the Download button alongside the relevant material.

Each row represents a material and the following details:

- Edition Type of material (Baseline/Standard). See more below\*
- Printer Name Name of the printer
- Material Name Name of the material
- Version Installed The version of the printer/material installed on your PC (if installed already)



- Version on Server The latest version of the printer/material which is available for download
- Description Comments on printer/material
- Status –Indicating if this material is available for download from the server and if yes, the download button is shown here. See more below\*\*

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#### \*Additional data regarding the Edition of materials:

There are different types of materials:

- Baseline Materials
  - Baseline materials do not require a dedicated material license, so they can used by every 3DXpert user.
  - A Baseline material is provided by 3D Systems with a very basic set of parameters in order to print a basic part.
  - $\circ$   $\;$  You have full access to edit/update all the Slicing parameters.
  - Once resaved, they can only be used on the same PC.
- Standard (Certified)
  - Standard materials are certified materials provided by the printer vendor (e.g. 3D Systems) and require related dedicated license material for each material.
  - $\circ$   $\;$  These materials are released as validated materials.
  - Editing of Standard materials is limited.
  - Any change in such a material makes it Non-Validated.
- <u>Empty Materials</u>
  - An Empty material is of type Baseline material. It does not require a dedicated material license.
  - Such a database does not include meaningful parameters. This is like a clean sheet of paper.
  - You have full access to edit/update all the Slicing parameters.

#### \*\* Additional data regarding the Status Column:

In case you have either not installed a certain printer/material or in case a newer version is available for download on the server, (Version installed < Version on Server) then you can

download a material by pressing the **Download** button.

In case the material installed on your PC is no longer available on the server, the status will be: Not available on server.

It is recommended to use such materials with caution; as such materials may not be supported by your current version of 3DXpert any longer. See how to delete a printer/material from your PC later on in this document.



The default Technology settings folder is

C:\ProgramData\3D Systems\3DXpert\14.0\Data\3D\_Printing\Technology\_Folder You can set a different folder, also a folder located on your network.

To change the default destination Technology folder, press	Setting	at the lower
left corner of the dialog and define a different folder.		

Installing a Printer:

3D Systems Printer database files are supplied with the 3DXpert installation. However, if the printer is missing from your PC or if you wish to install an additional printer, enter the Printer and Materials download tool and select the printer to download. Since the printer is not yet installed on your PC, only one line will show for this printer.

Click th	Download	button on this row				
Select Prin	nter Folder: 100	•	Back to Printer list			
,	update and download:			<u> </u>		
Edition	Printer Name	Material Name	Version Installed	Version on Server	Description	Status
	DMP Flex 100			11	Includes defaults for the appli	Download
Set	tting Go to Technology	Folder				Reload Close

This downloads and installs the printer definition files. At the end, the message come up:

	×
Printer DMP Flex 100 was installed in C:\ProgramData\3D Systems\3DXpert\14.0\Data\3D_Printing\Technology_Folder	
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This Printer installation does not include the material databases for this printer, so these should be downloaded separately.



Now download separately the required Baseline or Standard Materials by pressing the download buttons of each.

31	DXpert					
elect Print	ter Folder:	•	Back to Printer list	. 1		
	update and download:		Back to Printer list			
Edition	Printer Name	Material Name	Version Installed	Version on Server	Description	Status
	DMP Flex 100		11	11	Includes defaults for the appli	Up to date
Standard	DMP Flex 100	Empty		1		Download
tandard	DMP Flex 100	LaserForm 17-4PH (B)		5		Download
Standard	DMP Flex 100	LaserForm CoCr (B)		5		Download

Once the download of each material database is over, the following message shows up:

3DXpert - Download Printer & Material	Х
The file DMPFlex100_LaserFormCoCr(B)_SVM5_151020181128.zip has been downloaded to: C:\ProgramData\3D Systems\3DXpert\14.0\Data\3D_Printing\Technology_Folder. To install, extract the files from the zip to your 3DXpert's Technology Folder.	

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- 7. Launch Windows explorer and browse to the destination folder.
  If you did not change the default folder in the previous step, the ZIP files were downloaded to this path:
  C:\ProgramData\3D Systems\3DXpert\14.0\Data\3D\_Printing\Technology\_Folder
- 8. Move the downloaded zip file to the printer folder and extract it. Make sure to keep its structure, as any material database is a folder.
- 9. Note that you may return to the initial dialog displaying the list of printers and the status, using the Back to Printer list button

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😏 Update Printers &	Materials 14.0100
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3DXpert	
Select Printer Folder: ProX DMP 320B Check for update and download:	Back to Printer list

10. To download the entire printer folder (including printer information and all materials) to the download folder specified in the Setting button, press the **Download Entire Printer** button.





### Part 4 – Managing Printer and Materials

11. Although it is recommended to keep the standard folder names, as long as the contents of the folder are correct, the Update Printers & Materials tool does not require that the name for the folder will be exactly the same as the standard printer name. The folder names that you designate for printers and materials will be visible in the 3DXpert's Printer interaction.

This allows you to define/optimize your own Buildstyles and place in different folders.

Edit Printer	
Printer	
ProX DMP 320A	
Edit Printer Parameters	
Build Plate:	
Undefined	
Material	
Undefined	~
Undefined	
LaserForm Ti Gr1 (A) Sv6	>
LaserForm Ti Gr5 (A)_SV0 LaserForm Ti Gr5 (A)_SV4	🚺 🗸 🗸

To remove a material or printer from your PC, enter the Technology folder and delete the folder itself.

#### Note on Training Materials:

In order to go through some of the tutorials of 3DXpert, use the material database files for the printer called 'ProX DMP Training' should be used. This printer is a virtual printer and is supplied with the training kit.

Although the name of a real printer will show on the tray, its parameters are not practical to any current real printer and are not ready for actual printing.

After the installation of 3Dxpert, install the contents of the file 'ProX DMP Training.rar' to the folder -

C:\ProgramData\3D Systems\3DXpert\14.0\Data\3D\_Printing\Technology\_Folder