3DXpert™

GETTING STARTED

Software Installation
Setup of Printers/Materials

3DXpert 16

Tutorial_V9 - Updated: 3DXpert 16 beta release

3D SYSTEMS

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Introduction

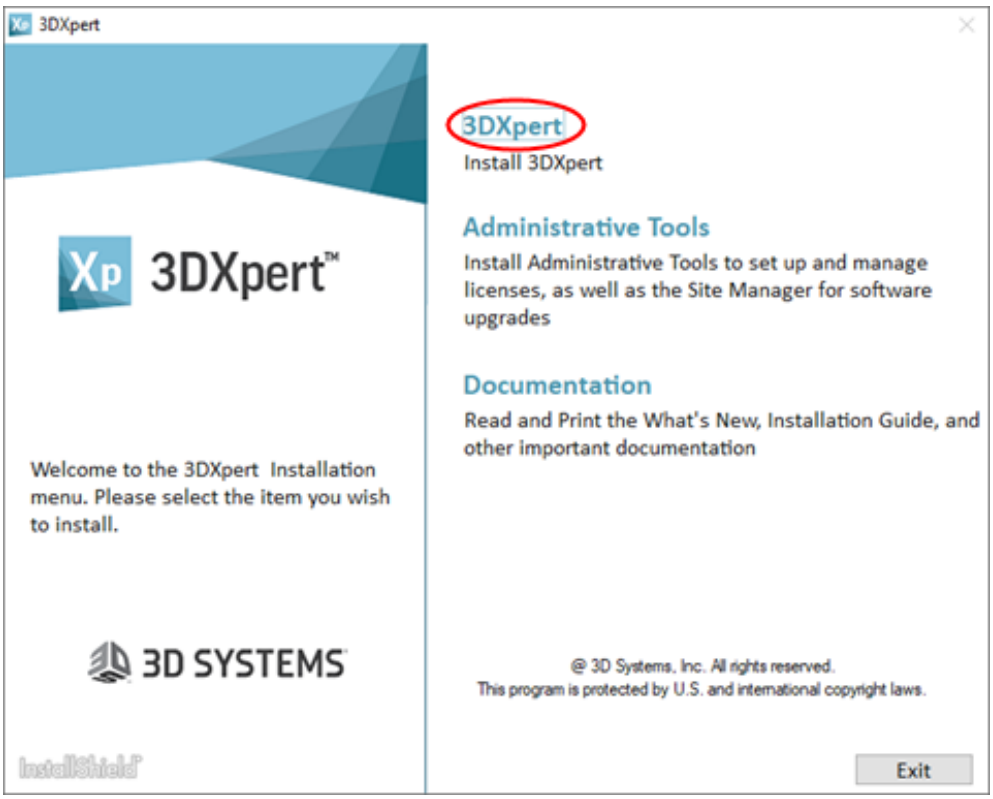
This document describes how to install 3DXpert and how to download, maintain and manage the printer and relevant materials configuration files for your printer.

This document complements the Installation Guide provided with the product.

Part 1 – 3DXpert Installation

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

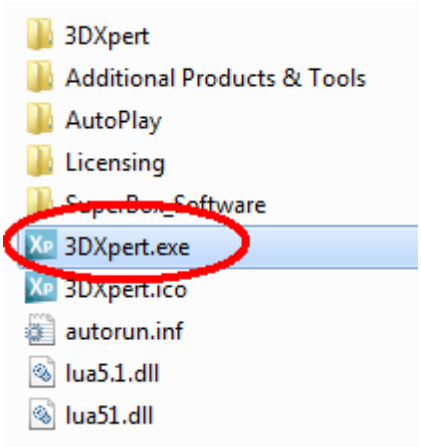
1. Once loading the DVD of 3DXpert on your computer, the following Autorun dialog is launched, allowing you to choose what to install.



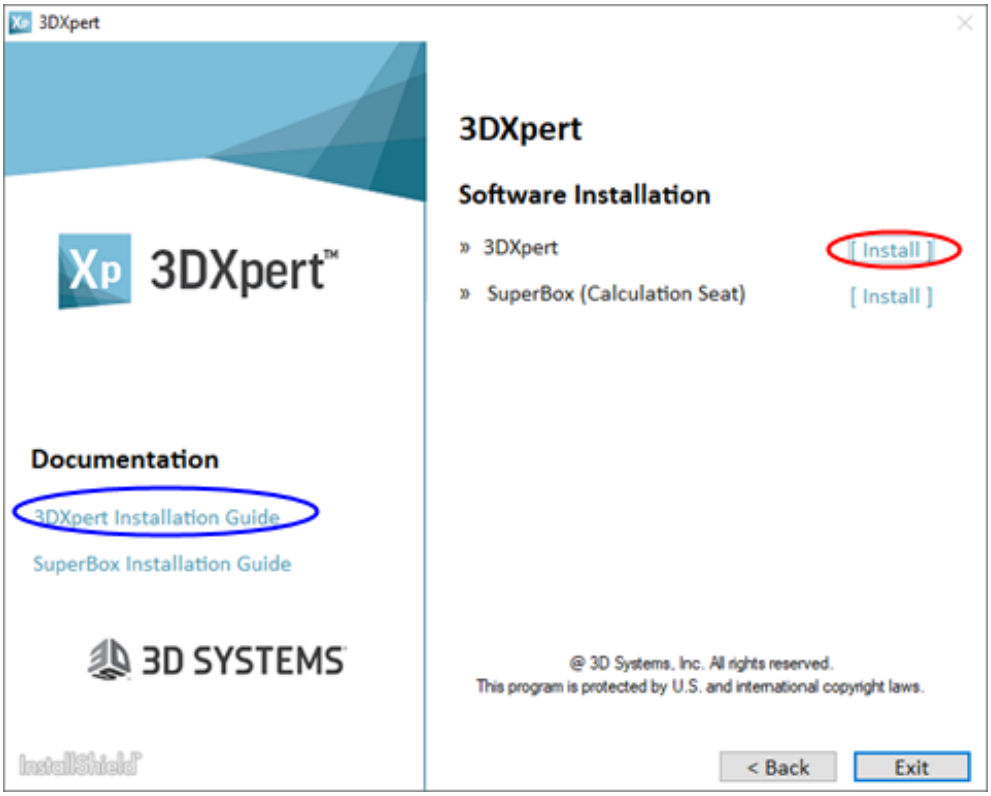
Press on **"3DXpert".**

The installation program runs automatically; proceed according to the Installation Wizard instructions.

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

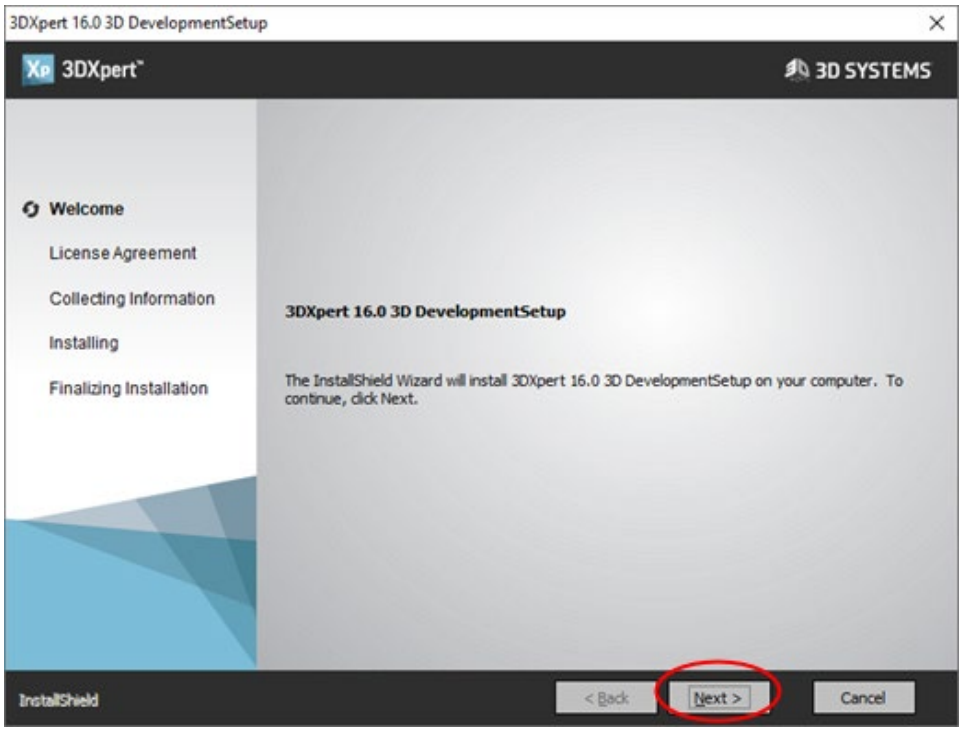


2. In the next page, choose Install (marked in red).



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

3. The installation commences with the 'Welcome' stage.
4. Click the Next button to proceed with the installation steps.



5. At the License Agreement stage, confirm the license agreement and continue to the next stage.
6. At the Collecting Information stage, 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.

7. At the Installing stage, press "Next" to start the installation process.
8. Towards the end of the installation process, you are asked to invoke the license manager.

   A flexible licensing system enables you to make the most efficient use of your software licenses. The system supports two types of licenses; **Local-Node License** (also called a Node-Locked or Standalone license) and **Floating License** (also called a Network license). A Local-Node and Floating license can be used together; this is called **Mixed Mode**. (For more information see the License Guide).

   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, click the "Launch the License Manager" checkbox.

9. Press the "**Finish**" button to finalize the setup.

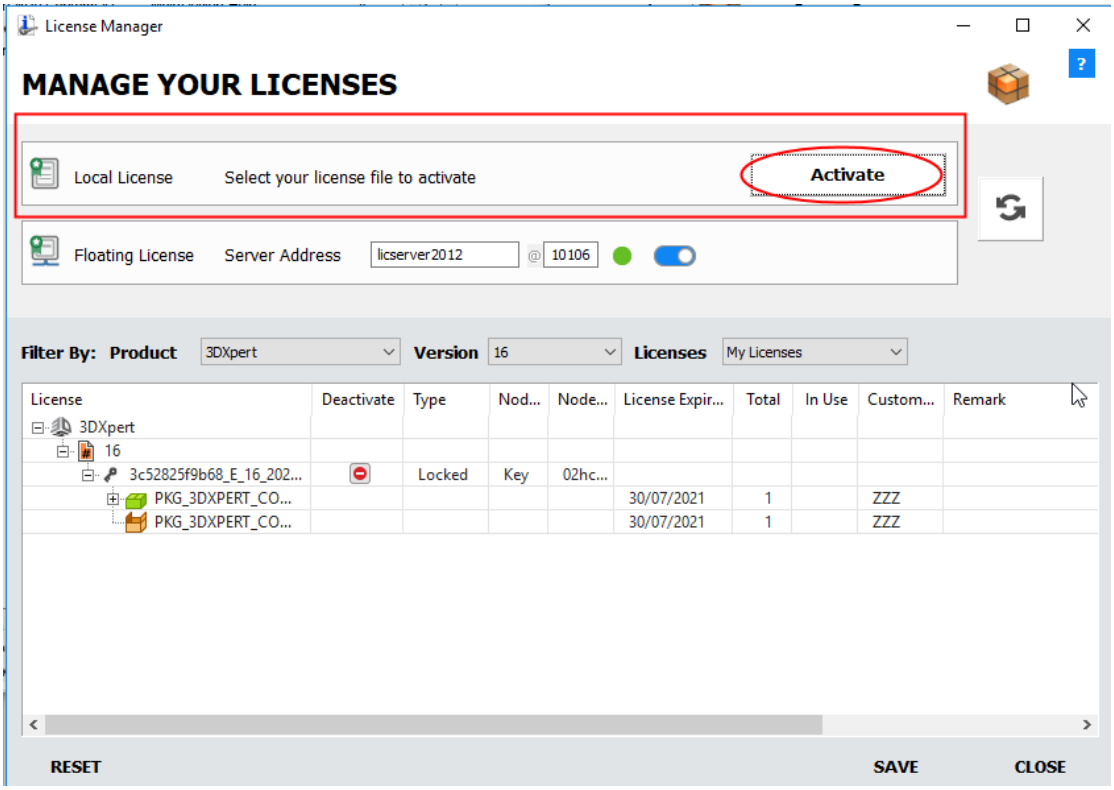
10. You have now successfully installed 3DXpert.

The **License Manager** is a tool to manage your license. You can either view your license, set your local license or connect to your server license (setting its name or IP).

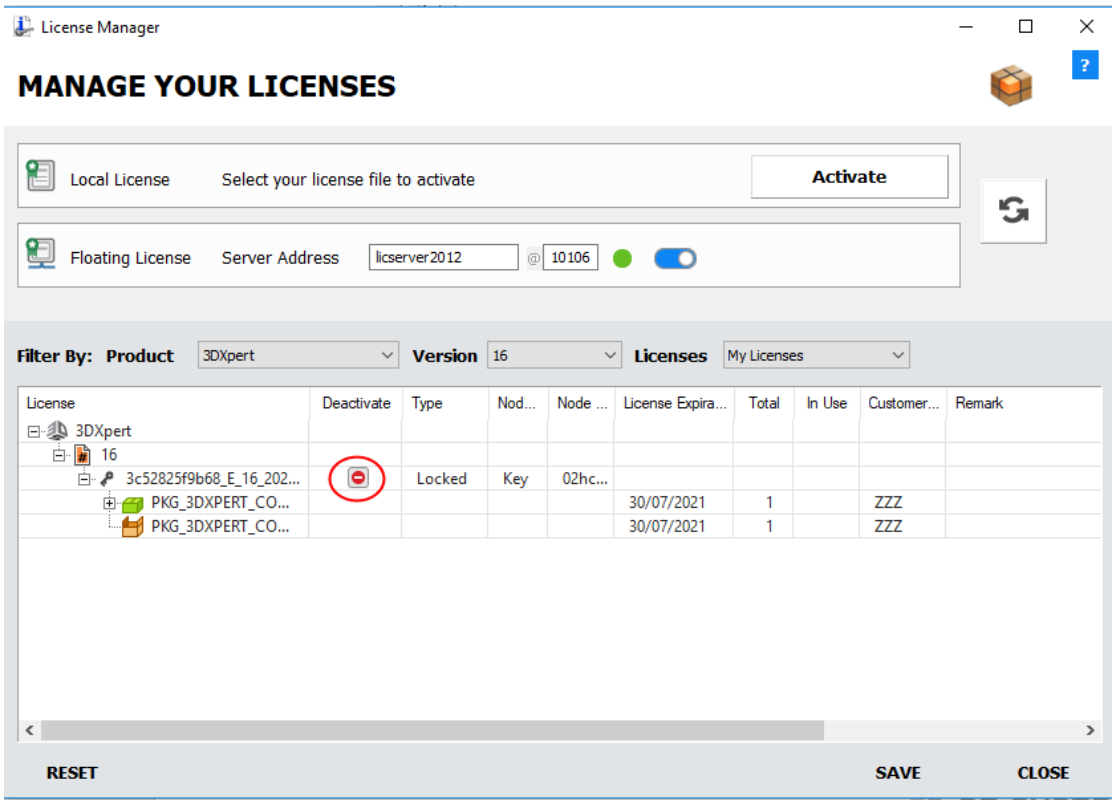
The **License Manager** defines the path to the local license file (received from your Provider or Reseller), or allows the user to enter the activation code, so that your product can verify the license, and also displays license information per product and version number.

To use this product, you require a license file. The license file is sent to you by your local Provider or Reseller. This license is issued for a specific computer and Hasp number.

As the License Manager launches, press the **Activate** button to select your license file to activate. Select the folder where your license file (*.cml) is located.



When a license is activated, a **Deactivate** icon is displayed in the **Deactivate** column of the license in the License Manager dialog. To deactivate a license, click the relevant **Deactivate** icon.



Press the **Save** button and **close** the License Manager.

Part 2 – 3DXpert Updates

Software updates are available for download on a regular basis.

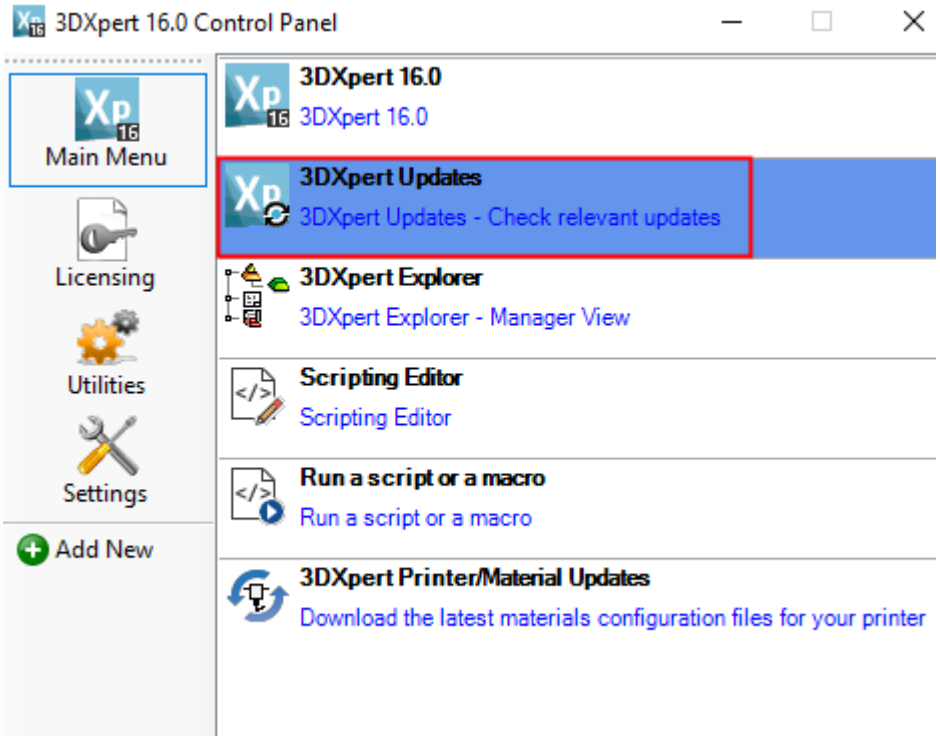
Such updates can include specific software corrections or larger software upgrades.

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

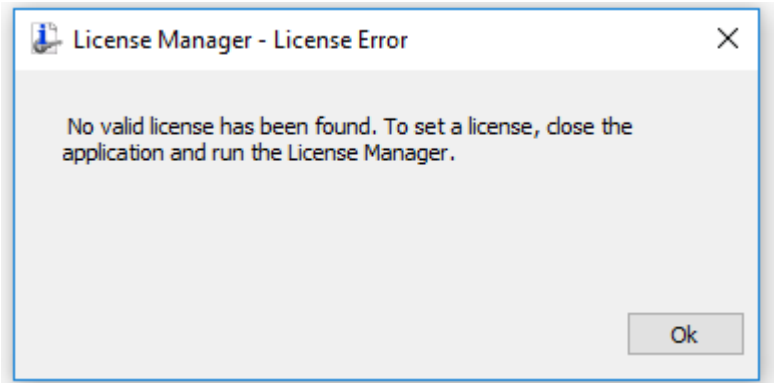
To get the updated, make sure that:

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

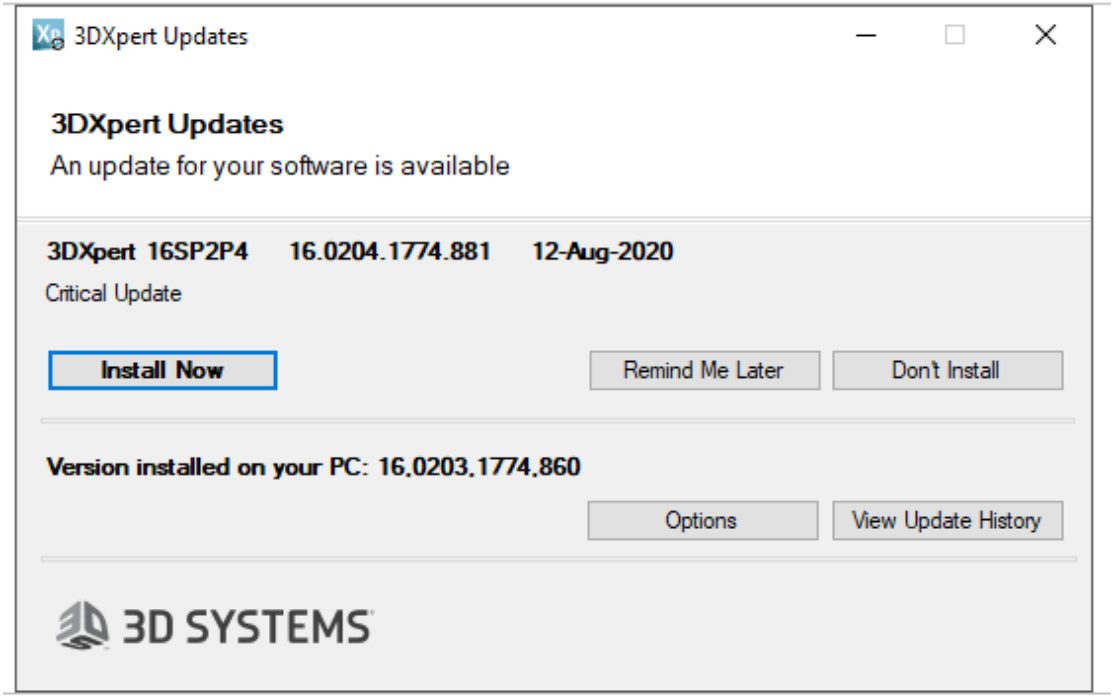
You can also manually check for updates by using **3DXpert Updates** from the 3DXpert Control panel as shown by the following image:



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



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:



Download the update and follow the instructions of its setup.

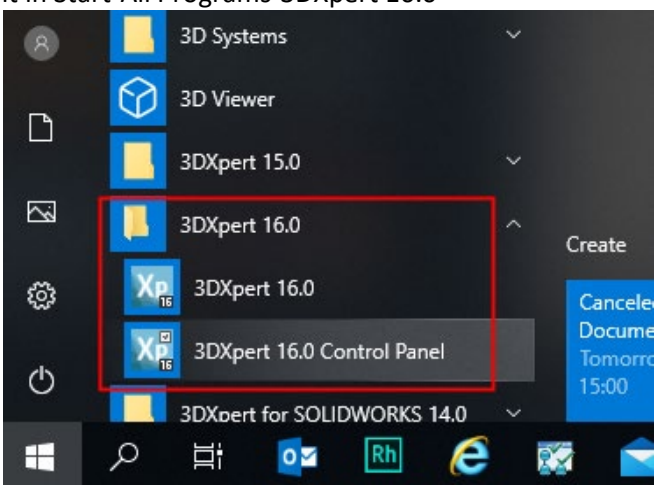
Note: After you update your 3DXpert, the same dialog may pop up again showing a subsequent available update.

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:

1. Launch the 3DXpert Control Panel.

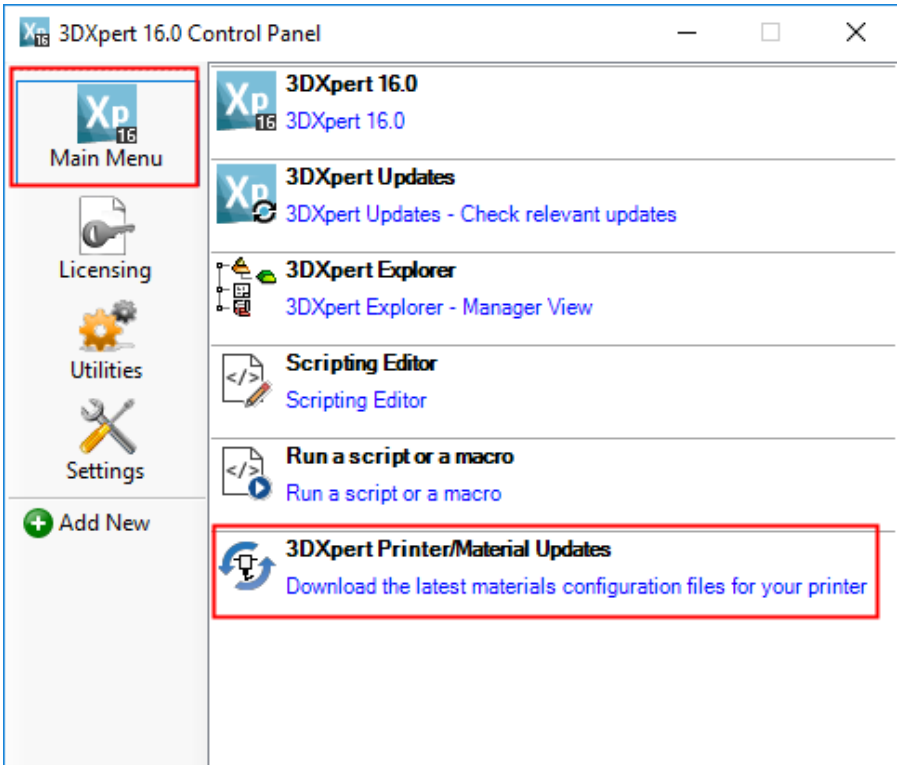
   Find it in Start-All Programs-3DXpert 16.0



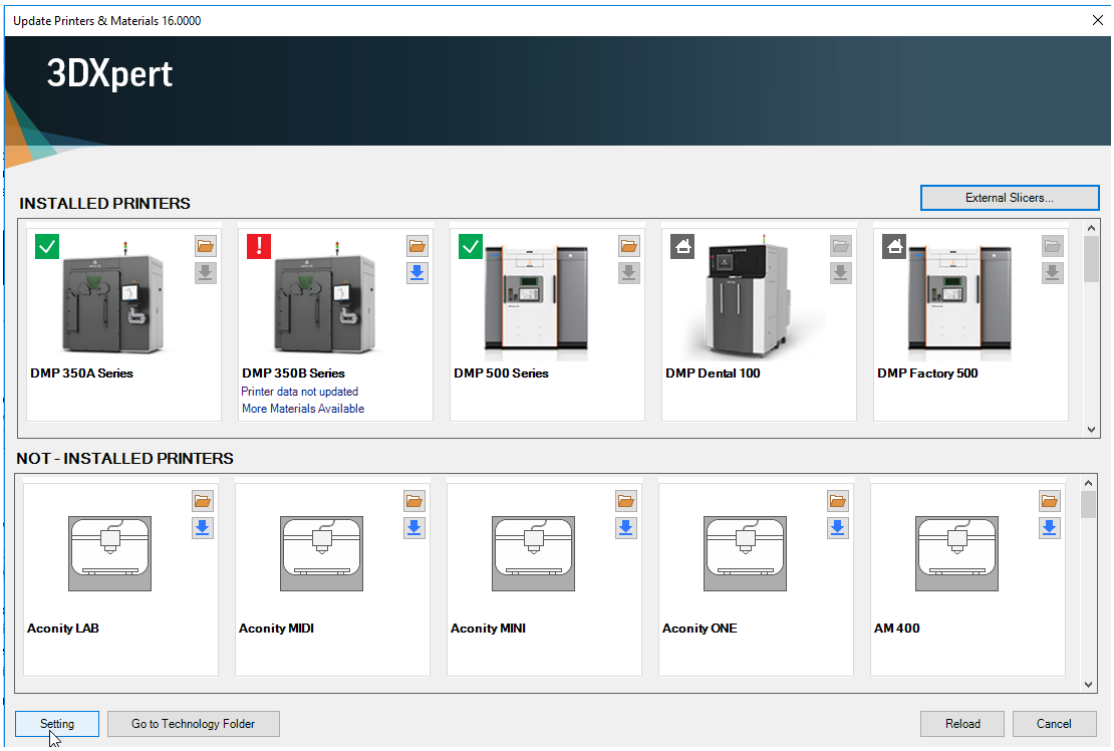
2. In the Main Menu, click the 3DXpert Printer/Material Updates.

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

   Alternatively, if you already have 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.



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.

Updates Frozen: Updates to an installed printer and its materials are frozen (disabled).
To freeze updates, right-click on an installed printer and select **Freeze** from the popup menu.
To make updates available again, right-click on a frozen printer and select **Unfreeze** from the popup menu

The installed printer and its materials are updated.

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.

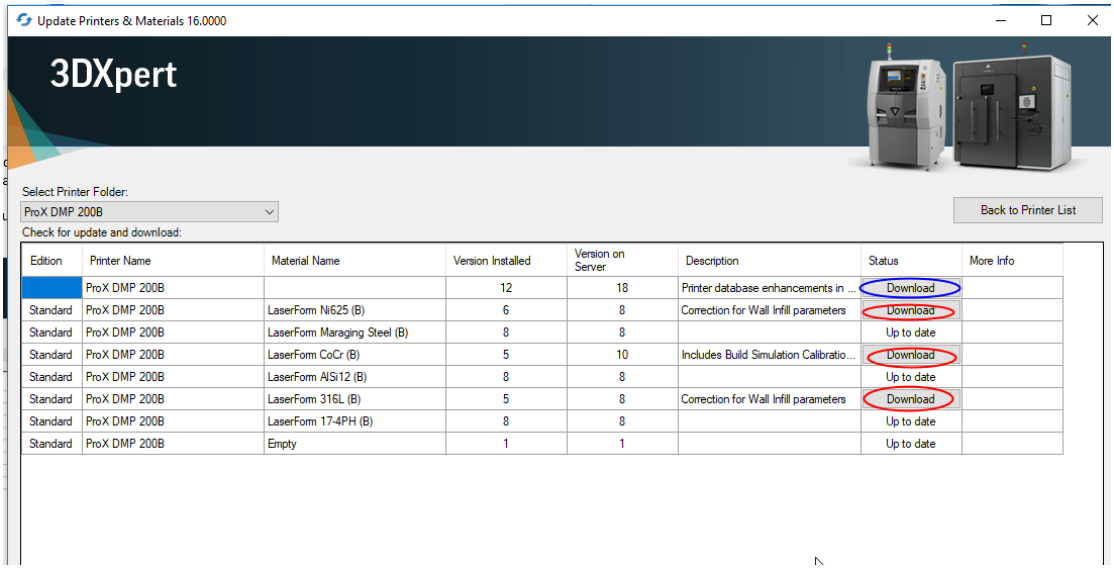
Database files for other printers are available as well (such as EOS, SLM etc…).

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 exists, also materials already installed on your 3DXpert.

Click the Download button alongside the relevant material.

The first row in the Update table (marked in blue circle) shows the printer version and the remaining rows show the versions of the materials which are installed and/or available for this printer on the server.



Edition	Printer Name	Material Name	Version Installed	Version on Server	Description	Status	More Info
	ProX DMP 200B		12	18	Printer database enhancements in ...	Download	
Standard	ProX DMP 200B	LaserForm Ni625 (B)	6	8	Correction for Wall Infill parameters	Download	
Standard	ProX DMP 200B	LaserForm Maraging Steel (B)	8	8		Up to date	
Standard	ProX DMP 200B	LaserForm CoCr (B)	5	10	Includes Build Simulation Calibratio...	Download	
Standard	ProX DMP 200B	LaserForm AlSi12 (B)	8	8		Up to date	
Standard	ProX DMP 200B	LaserForm 316L (B)	5	8	Correction for Wall Infill parameters	Download	
Standard	ProX DMP 200B	LaserForm 17-4PH (B)	8	8		Up to date	
Standard	ProX DMP 200B	Empty	1	1		Up to date	

Each row represents a material and the following details:

- Edition – Type of material (Baseline/Standard). See more below* on page 12.
- 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** on page 12.

**Additional data regarding the Edition of materials:*

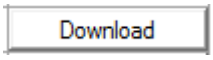
There are different types of materials:

- Baseline Materials
  - Baseline materials do not require a dedicated material license, so they can be 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.
  - You have full access to edit\update all the Slicing parameters.
  - Once resaved, they can only be used on the same PC.

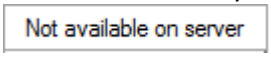
- Standard (Certified)
  - Standard materials are certified materials provided by the printer vendor (e.g. 3D Systems) and require related dedicated license material for each material.
  - These materials are released as validated materials.
  - Editing of Standard materials is limited.
  - Any change in such a material makes it Non-Validated.

- Empty Materials
  - 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:*

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

button.

If the material installed on your PC is no longer available on the server, the status will be: 

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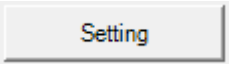
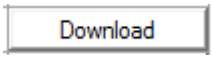
It is recommended to use such materials with caution; as such materials may not be supported by your current version of 3DXpert any longer. See how to delete a printer/material from your PC later on in this document.

The default Technology settings folder is
C:\ProgramData\3D Systems\3DXpert\16.0\Data\3D_Printing\Technology_Folder
You can set a different folder, also a folder located on your network.
To change the default destination of the Technology folder, press

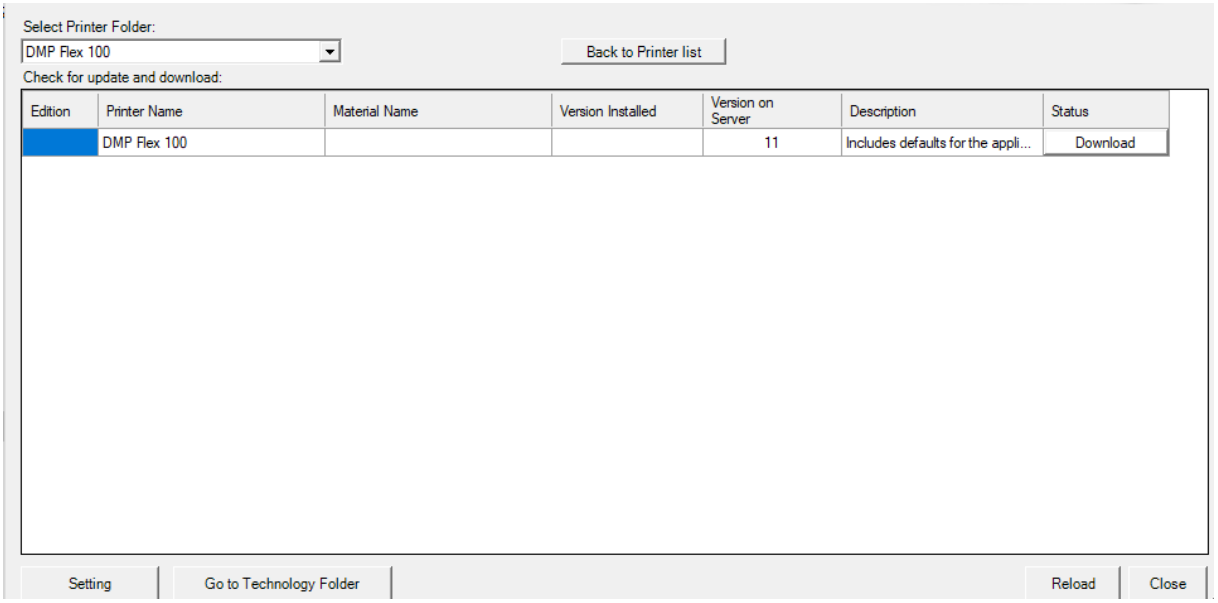


at the lower left corner of the dialog and define a different folder.

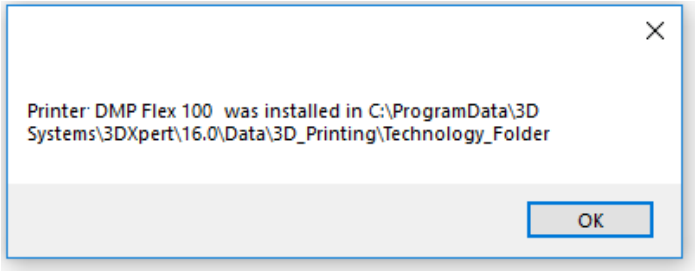
Installing a Printer:
3D Systems Printer database files are supplied with the 3DXpert installation. However, if the printer is missing from your PC or if you wish to install an additional printer, enter the Printer and Materials download tool and select the printer to download.
Since the printer is not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

Click the 

button on this row.

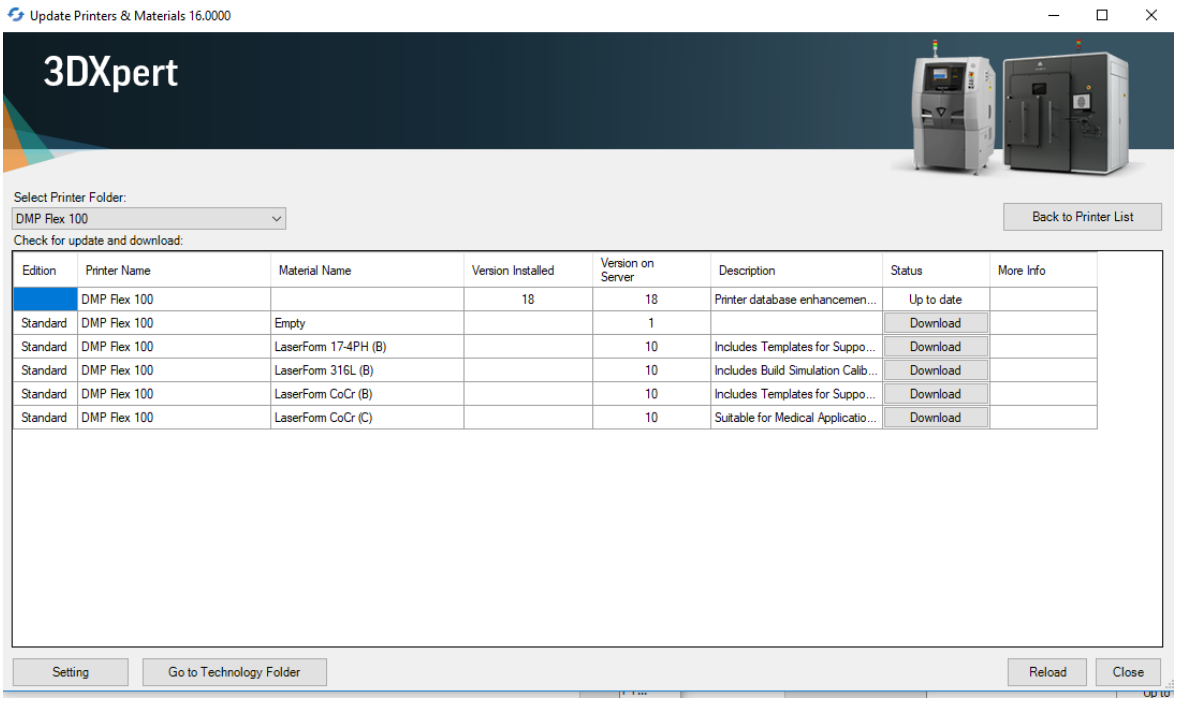


This downloads and installs the printer definition files. At the end, the message comes up:

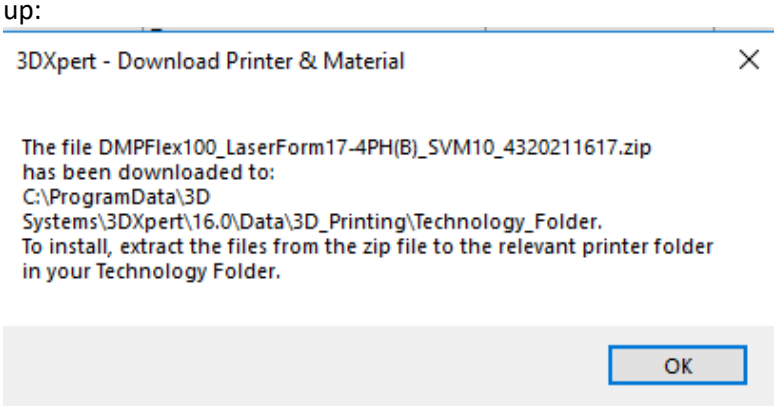


This Printer installation does not include the material databases for this printer, so these should be downloaded separately.

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



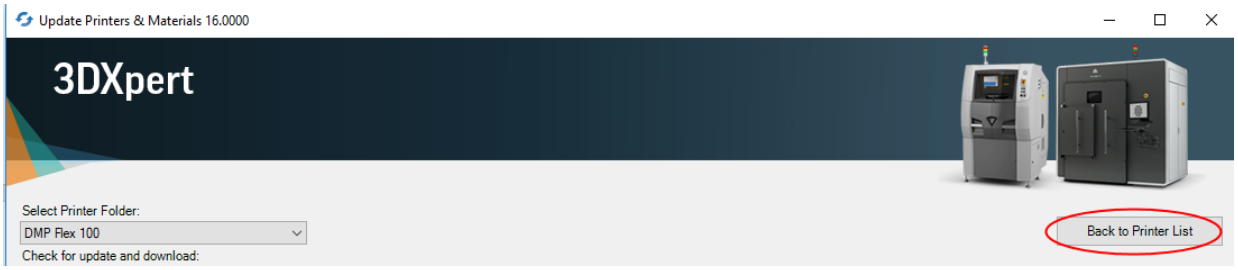
Once the download of each material database is over, the following message shows up:



3. 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\16.0\Data\3D_Printing**Technology_Folder**

4. Extract the zip file to the relevant printer folder. Make sure to keep its structure, as any material database is a folder.

5. Note that you may return to the initial dialog displaying the list of printers and the status, using the Back to Printer List button.



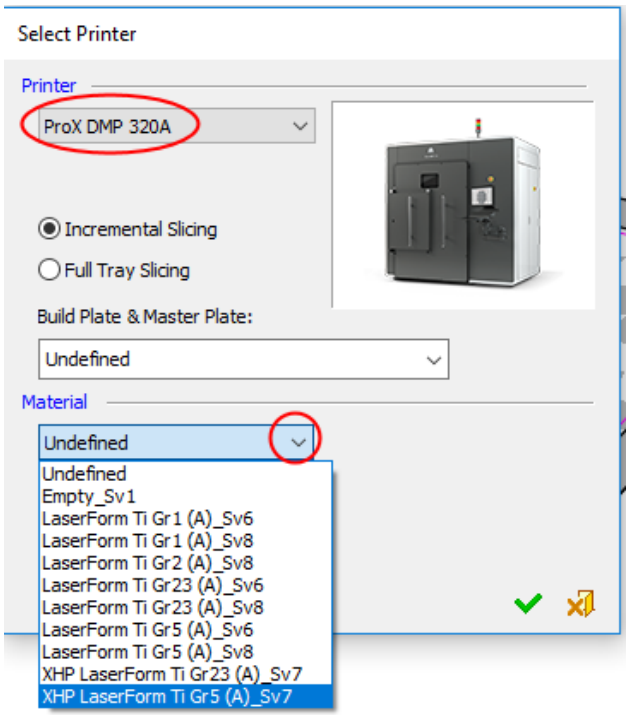
6. To download the entire printer folder (including printer information and all materials) to the download folder specified in the Setting button, press the **Download Entire Printer** button.

Part 4 – Managing Printer and Materials

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 Build Styles and place them in different folders.



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, the material database files for the printer called 'ProX DMP Training' should be used. This printer is a virtual printer and it is normally 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\16.0\Data\3D_Printing\Technology_Folder

Alternatively, this Printer may be available for download from the 3Dxpert Printers & Materials download server. Download the printer and all the available materials for the ProX DMP Training.