



DTX Studio™ Clinic

Version 4.10

Installation Guide

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Introduction

Disclaimer of Liability

This product is part of an overall concept and may only be used in conjunction with the associated original products according to the instructions and recommendations of Nobel Biocare, hereinafter referred to as 'the Company'. Non-recommended use of products made by third parties in conjunction with products of the Company will void any warranty or other obligation, express or implied. The user has the duty to determine whether or not any product is suitable for the particular patient and circumstances. The Company disclaims any liability, express or implied, and shall have no responsibility for any direct, indirect, punitive or other damages, arising out of or in connection with any errors in professional judgment or practice in the use of these products. The user is also obliged to study the latest developments in regard to this product and its applications regularly. In cases of doubt, the user has to contact the Company. Since the utilization of this product is under the control of the user, it is his/her responsibility. The Company does not assume any liability whatsoever for damage arising thereof.

Cybersecurity

Protecting your practice against cybersecurity threats is a shared responsibility between us as the manufacturer and you as the health care provider. Nobel Biocare has taken precautions to ensure that the software is protected against such threats.

It is recommended that active and up-to-date antivirus and anti-malware software, together with a correctly configured firewall, are installed on the computer where DTX Studio Clinic is to be used. Failure to do so may lead to unauthorized access.

In a setup with DTX Studio Core, it is recommended to connect with DTX Studio Core through https. See the DTX Studio Core guidelines on how to set up this connection.

It is recommended to enable audit logging in the settings and ensure the protection of these logs against unauthorized access. Failure to do so may prevent malicious activity from being detected.

Use two-factor authentication to access the software and always lock the computer when it is left unattended. Failure to do so may lead to unauthorized access.

Make sure the office network is protected from unauthorized access and separated from the visitor network. Failure to do so may lead to unauthorized access.

To quickly recover from any unexpected system failure or malicious event that may cause data loss, it is advised to regularly back up the patient data.

It is recommended to start DTX Studio Clinic without administrative privileges. Failure to do so may lead to unintended starting of malicious third-party executables.

It is recommended to always update DTX Studio Clinic to the latest available software version. Failure to do so may lead to unauthorized access.

For more technical details concerning back-ups, firewall and security settings during installation, please refer to the 'Firewall Settings' on page 14.

What to Do in Case of a Cybersecurity Event?

In the event of a potential system compromise by intrusion or malicious software, the user may note unfamiliar product behavior and/or performance impact. In this case the user is advised to contact customer support immediately (see 'Technical Support' on page 17).

Preparing Your Computer

Make sure your computer is connected to the Internet.

Check that your computer can open and display .pdf files (double-click on a .pdf file to test). Adobe® Acrobat® Reader is an example of software typically used to open and display .pdf files.

Log on to your computer with a user account that has administrator rights. We recommend that all other software on your computer is closed before DTX Studio Clinic is installed.

Ensure your computer meets the recommended system requirements. For detailed information refer to the DTX Studio Clinic Computer Guidelines. Download these guidelines from the [DTX Studio Documentation Library](#) or [DTX Studio Go](#). If you need a digital or printed copy of the latest version, please contact your local representative.

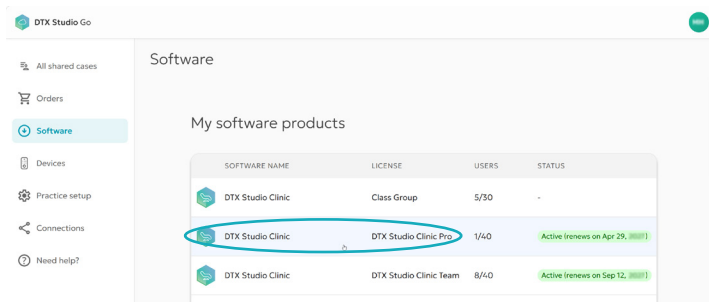
Where to Find the Installer and the Installation Key

1. Go to <https://go.dtxstudio.com>. The portal is best viewed with Google Chrome, Microsoft Edge or Safari browsers. Internet Explorer is not supported.
2. Log in with the username and password that you created when signing up to DTX Studio Go.

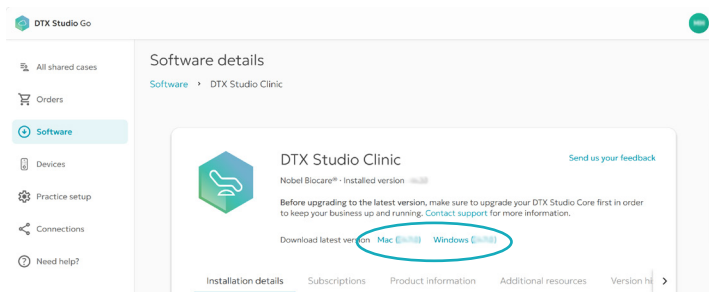
Note

If you have trouble signing up to DTX Studio Go, please contact customer support.

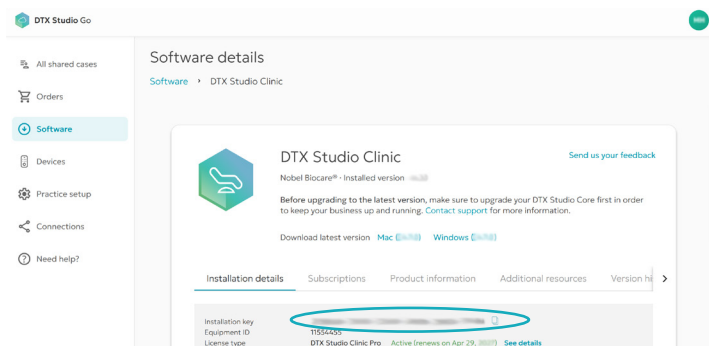
3. On the [Software](#) tab, click the DTX Studio Clinic version you need.



4. To download the latest version of the selected software product, click [Mac](#) or [Windows](#), depending on the operating system you wish to install DTX Studio Clinic on. The installer file is downloaded automatically to your download folder.



5. On the [Installation details](#) tab on the DTX Studio Clinic page, copy the installation key.



Note

To add an existing user to the license, click [Add users](#) on this page and select the user. To add new users to DTX Studio Go, go to the [Users](#) tab and click [Add a new user](#).

DTX Studio Clinic Installation

Installation on Windows®

Install the Software

1. Double-click the downloaded installation file.
2. A message dialog appears asking you to allow this application to make changes to your PC. Click **Yes**.
3. If any required components are missing, click **Install**. If a device installation dialog appears, click **Install** again to confirm.
4. A welcome message appears. Click **Next**.
5. Read the DTX Studio Clinic End-user License Agreement carefully. To accept, select **I accept the terms in the license agreement**.
6. Click **Next**.
7. Next, you can keep the default location for the installation (**Applications**). To change this location, click **Change**, browse to the desired folder and click **OK**.

Note

This DTX Studio Clinic version does not support non-Latin characters in the path name.

8. Click **Next**.
9. Click **Install**.
10. A .dcm file association dialog is displayed. To set DTX Studio Clinic as the default .dcm file viewer, and directly import DICOM sets when opening a .dcm file, click **Yes**. Otherwise, click **No**.
11. Click **Finish**.

Note

A DTX Studio Clinic icon to start the software is now available on your desktop.

Configure the Software

Important

This section describes the activation procedure when you have an internet connection. To activate the software on a computer with no active internet connection, a dedicated DTX Studio Clinic Offline license is required. For instructions on activation in an offline environment, refer to the dedicated DTX Studio Offline document.

1. The configuration wizard is started.
2. Select **I accept the terms in the license agreement**. Click **Next**.

Note

The license agreement is available at all times in the **Account Details** dialog within the DTX Studio Clinic software.

3. Enter or paste the installation key. Click **Next**.
4. Select a **Working folder**. This is the location where DTX Studio Clinic cases will be stored. To change the default location, click **Browse**. Browse to the desired folder and click **OK**.

Notes

- Be aware that each user of the computer on which DTX Studio Clinic is installed must have full access rights to the selected Working folder.
- If you create a working folder in the Local AppData folder, make sure there are no spaces in the path name. Please also note that this DTX Studio Clinic version does not support non-Latin characters in the path name.
- When DTX Studio Clinic is connected to DTX Studio Core, please follow the DTX Studio Core guidelines to create and restore back-ups.
- Make sure to regularly back up the working folder when DTX Studio Clinic is used as a stand-alone software (not connected to DTX Studio Core).

5. Click **Next**.
6. Click **Finish**.
7. A website containing the Instructions for Use documents in the different available languages is displayed. Choose a language and read these instructions carefully. The system automatically checks for updates and the software is ready to use.

It is recommended to use DTX Studio Clinic while connected to the Internet to receive software updates, etc.

Installation on MacOS®

Install the Software

1. Double-click the Apple® Disk Image file (.dmg). The mounted DTX Studio Clinic disk will appear on your desktop.
2. Double-click this file. An installation dialog appears, showing the following options:
 - DTX Studio Clinic (DTXStudio.pkg)
 - License Agreement
 - VDDS (see below)
3. Double-click [DTXStudio.pkg](#).
4. A welcome screen is displayed. Click [Continue](#).
5. The DTX Studio Clinic End-user License Agreement is displayed. Read it carefully.
6. Click [Continue](#). A warning is displayed, asking for acceptance of the Software License Agreement.
7. Click [Agree](#). If you click [Disagree](#), the installation procedure is aborted.
8. Next, you can keep the default location for the installation ([Applications](#)). To change this location, click [Change Install Location](#), browse to the desired disk and click [OK](#).
9. Click [Continue](#).
10. Click [Install](#).
11. Enter the username and password of an administrator account.
12. Click [Install Software](#).

Configure the Software

Important

This section describes the activation procedure when you have an internet connection. To activate the software on a computer with no active internet connection, a dedicated DTX Studio Clinic Offline license is required. For instructions on activation in an offline environment, refer to the dedicated DTX Studio Offline document.

1. When the installation is finished, the software is opened and a configuration wizard is shown. A welcome screen is displayed. Click [Continue](#).

Note

A DTX Studio Clinic icon to start the software is available in [Applications](#) (default location).

2. To accept the agreement, click [I accept the terms in the license agreement](#) and click [Next](#). Alternatively, click [Exit](#) and the installation procedure will abort.

Note

The license agreement is available at all times in the [Account Details](#) dialog within the DTX Studio Clinic software.

3. Enter the DTX Studio Clinic license key. Click [Next](#).
4. Select the [Working folder](#) where the privately stored patient-related data will be saved. The default location is `/Users/Shared/DTX Studio`.

Notes

- Be aware that each user of the computer on which DTX Studio Clinic is installed must have full access rights to the selected Working folder.
- When DTX Studio Clinic is connected to DTX Studio Core, please follow the DTX Studio Core guidelines to create and restore back-ups.
- Make sure to regularly back up the working folder when DTX Studio Clinic is used as a stand-alone software (not connected to DTX Studio Core).

5. Click [Next](#).
6. Click [Finish](#).
7. A website containing the Instructions for Use documents in the different available languages is displayed. Choose a language and read these instructions carefully. The system automatically checks for updates and the software is ready to use.

It is advisable to use DTX Studio Clinic while connected to the Internet in order to receive software updates etc.

Import Settings (Optional)

From DTX Studio Core

If a DTX Studio Core administrator manages and uploads DTX Studio Clinic files to DTX Studio Core, the settings file will be distributed centrally. Upon launching DTX Studio Clinic, the system will automatically verify the presence of a settings file on DTX Studio Core. If the file is detected, the settings will be copied and applied.

As long as a settings file is available on DTX Studio Core, any local settings within DTX Studio Clinic will be overwritten. Additionally, it is possible to upload a partial settings file, such as one containing only image settings.

From a Different DTX Studio Clinic Installation

If the settings of a DTX Studio Clinic installation have been exported, you can import and apply them to your new DTX Studio Clinic installation.

To get started with importing settings, look up the 'Share settings' topic in the help file. Click  in DTX Studio Clinic and select [Help](#).

Connect with Your Practice Management System (PMS)

Note

Connecting DTX Studio Clinic to a practice management system is an optional step.

Configure for VDDS on Windows

The Verband Deutscher Dental-Software Unternehmen e.V. (VDDS) (Association of German Dental Software Enterprises) is the umbrella association representing the interests of German enterprises which produce dental practice management and organizational software.

Register the Software

To use DTX Studio Clinic in a VDDS setup, register with VDDS:

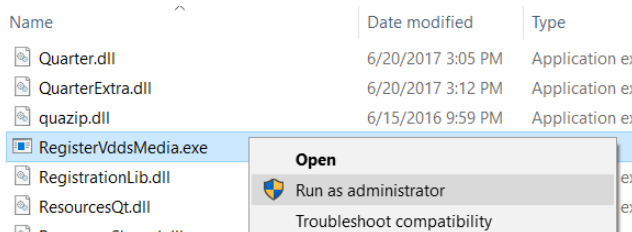
1. Open the command prompt as administrator in the folder where DTX Studio Clinic was installed (the default installation folder is C:\Program Files\DTX Studio\) and run the 'RegisterVddsMedia.exe' program.

```
C:\Windows\system32\cmd.exe

C:\Program Files\DTX Studio>RegisterVddsMedia.exe

C:\Program Files\DTX Studio>
```

Alternatively, right-click 'RegisterVddsMedia.exe' in the installation folder and select [Run as administrator](#).



2. DTX Studio Clinic is now correctly configured to be used within the VDDS setup.

The VDDS configuration file 'VDDS_MMI.INI' in the Windows install directory (e.g. C:\Windows\VDDS_MMI.INI), will be created and/or modified.

Unregister the Software

To stop using DTX Studio Clinic as a VDDS application, unregister from VDDS:

1. Open the command prompt as administrator in the folder where DTX Studio Clinic was installed (e.g. C:\Program Files\DTX Studio\) and run the 'RegisterVddsMedia.exe' program with the '-u' (uninstall) option.

```
C:\Windows\system32\cmd.exe

C:\Program Files\DTX Studio>RegisterVddsMedia.exe -u

C:\Program Files\DTX Studio>
```

2. DTX Studio Clinic is now correctly unregistered from VDDS.

Note

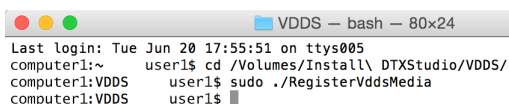
Uninstalling DTX Studio Clinic via the InstallShield wizard will automatically unregister DTX Studio Clinic from VDDS.

Configure for VDDS on MacOS®

Register the Software

To use DTX Studio Clinic in a VDDS setup, register with VDDS:

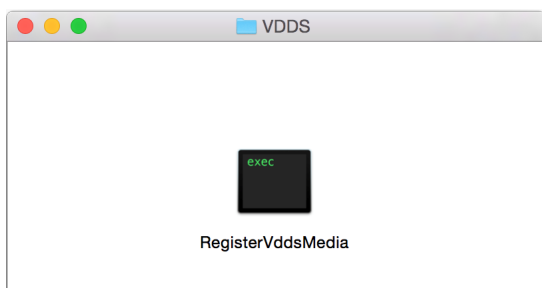
1. Mount the .dmg drive of the version that you want to register to the VDDS configuration. Inside the mounted .dmg you will see a folder called 'VDDS'.
2. Open a 'Terminal' application in this folder (see: /Applications/Utilities) and run the 'RegisterVddsMedia' command using an account with administrative rights.



```

VDDS — bash — 80x24
Last login: Tue Jun 20 17:55:51 on ttys005
computer1:~ user1$ cd /Volumes/Install\ DTXStudio/VDDS/
computer1:VDDS user1$ sudo ./RegisterVddsMedia
computer1:VDDS user1$
  
```

Alternatively, run the tool by double-clicking the 'RegisterVddsMedia' executable in the VDDS folder.



3. Enter your administrator account password.



```

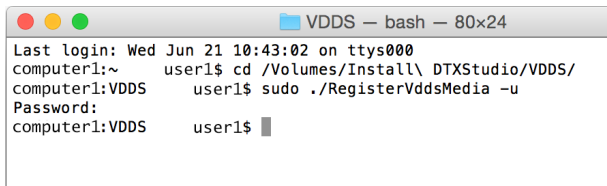
developer — RegisterVddsMedia — sudo — 80x24
Last login: Mon Jun 26 13:05:48 on console
/Volumes/Install\ DTXStudio/VDDS/RegisterVddsMedia ; exit;
computer1:~ user1$ /Volumes/Install\ DTXStudio/VDDS/RegisterVddsMedia ; exit
;
Password:
  
```

4. DTX Studio Clinic is now correctly configured to be used within the VDDS setup.
The VDDS configuration file 'VDDS_MMI.INI' in the VDDS system directory (e.g. /etc/vdds/VDDS_MMI.INI), will be created and/or modified.

Unregister the Software

To stop using DTX Studio Clinic as a VDDS application, unregister from VDDS:

1. Mount the .dmg drive of the DTX Studio Clinic version that you want to unregister from your VDDS configuration. Inside the mounted .dmg you will see a folder called 'VDDS'.
2. Open a 'Terminal' application in this folder (see: /Applications/Utilities) and run the 'RegisterVddsMedia' command with the '-u' (uninstall) option using an account with administrative rights.



```

VDDS — bash — 80x24
Last login: Wed Jun 21 10:43:02 on ttys000
computer1:~ user1$ cd /Volumes/Install\ DTXStudio/VDDS/
computer1:VDDS user1$ sudo ./RegisterVddsMedia -u
Password:
computer1:VDDS user1$

```

3. If registration was successful (no error messages appear), DTX Studio Clinic is now correctly unregistered from VDDS.

Configure for a PMS Other than VDDS

For more information on how to set up the integration of your PMS with DTX Studio Clinic through Open Practice Protocol (OPP), please contact your local customer support.

Firewall Settings

To connect DTX Studio Clinic to external services and/or applications either a direct connection can be used or it can be configured to use a proxy. In case of a direct connection, the firewall should allow the connection to the specified servers. In case of a proxy setup, proxy settings should be set correctly on the client PC, as described below.

Note

To allow DTX Studio Clinic to connect to external services and/or applications, it is recommended always to be connected to the Internet. If that is not possible, a connection should be established at least once every 14 days. Otherwise your access to DTX Studio Clinic may be temporarily suspended. When a connection to the internet is re-established, your access to DTX Studio Clinic will be restored.

Server and Port Configuration

DTX Studio Go Server

The following table describes the URLs used by DTX Studio Clinic. The corresponding IP addresses of these URLs can be found by DNS lookup. For example, on Windows this can be done by opening a command prompt and using the nslookup command.

For example "`nslookup nobellicense.nobelbiocare.com`".

Protocol	URL	Description
https	nobellicense.nobelbiocare.com	URL used to contact the DTX Studio Go license server.
https	nobelstats.nobelbiocare.com	URL used to send anonymous statistical information to DTX Studio Go.

DTX Studio Core Server

DTX Studio Clinic is typically used together with DTX Studio Core, therefore it needs access to the DTX Studio Core server. This server is usually located inside the local area network at the IP address provided by the IT team.

Following table describes protocols and addresses used for communication with DTX Studio Core.

Protocol	URL	Port	Description
https	<<Configured by customer>>	26850 by default for https. Can be customized.	URL used to contact the DTX Studio Core server.
http		26851 by default for http. Can be customized.	URL used to contact the DTX Studio Core server.

Note

The http protocol is not recommended due to its lack of security. Protocol, URL and port are configured in the DTX Studio Clinic settings.

Localhost Ports

DTX Studio Clinic uses inter-process communication (IPC) and the web-sockets (WS) protocol for local communication between modules. All the ports should be available and unblocked.

Note

Port numbers are dynamically assigned, starting from port 4440. In Windows, the dynamic ports file can be found in the %programdata%\Medicim\Ports\ folder. In macOS, the dynamic ports file is located in the /Users/Shared/Ports/ folder. PMS API ports can be manually set in the DTX Studio Home PMS settings.

Proxy Settings

DTX Studio Clinic uses OS proxy settings to determine whether to directly communicate with servers or by using a proxy server.

On Windows different proxy settings are available:

- **User proxy settings.** These settings are available via [Proxy settings](#) of the System settings. Those proxy settings are typically used by simple desktop applications or by browsers. They are specified per user, not available for services, and DTX Studio Clinic does not use those settings.
- **WinHTTP proxy settings.** Those settings are used by services, like Windows Updates service. DTX Studio Clinic uses WinHTTP proxy settings to communicate with all the servers, including DTX Studio Core.

WinHTTP proxy settings are usually set via command prompt. Examples:

- `netsh winhttp show proxy` is a command to show the current WinHTTP proxy settings.
- `netsh winhttp set proxy "<proxy>:<port>" bypass-list="<local-net>"` is a command to use the <proxy> proxy server at the <port> port and to avoid using a proxy when working with URLs/IP addresses of the <local-net> net.
- `netsh winhttp reset proxy` is a command to reset proxy settings, and to use direct connection.

On macOS the relevant proxy configuration should be set in the secure Web Proxy (HTTPS) settings, as specified in the Apple Support documentation. If the DTX Studio Core connection is configured to use the HTTP protocol, then the Web Proxy (HTTP) settings should also be specified.

Important

Connection to DTX Studio Core also uses proxy settings. If the proxy server is located outside the local network, it will not be able to forward any requests back to the local network. Therefore, it is necessary to specify a bypass-list for the local network, as shown in the example below.

Configuration Examples

Windows with Local Proxy Server

This is an example of configuring Windows to use a proxy server located in the same local network as DTX Studio Clinic, with the proxy server available at the 10.0.1.100:8080 address.

Start command line as administrator. Execute the following command:

```
netsh winhttp set proxy proxy-server="10.0.1.100:8080"
```

Windows with an External Proxy Server

This is an example of configuring Windows to use a proxy server **sampleproxy.com:8080** located outside the local network and with the local network using IP addresses in the 10.*.*.* range.

Start command line as administrator. Execute the following command:

```
netsh winhttp set proxy proxy-server="sampleproxy.com:8080"  
bypass-list="10.*.*.*"
```

Configure Proxy Server on MacOS

1. Choose [Apple menu](#).
2. Select [System Settings](#).
3. Click [Network](#) in the sidebar.
4. Click a network service on the right.
5. Click [Details](#).
6. Click [Proxies](#).
7. Specify relevant proxy settings in the [Secure Web Proxy \(HTTPS\)](#) configuration.
8. If necessary, specify relevant proxy settings in the [Web Proxy \(HTTP\)](#) configuration as well.

Technical Support

If you encounter any problems during the installation, please contact DTX Studio Technical Support:

- support@dtxstudio.com
- <https://tech.dexis.com/support>

For North America:

- dtxsupport.na@dexis.com
- Phone number: +1-833-389-2255



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