Software	Facad Installer	SW version	3.16	Rev date	2026-03-26
Title	Facad Installer User's Guide				

Facad Installer User's Guide

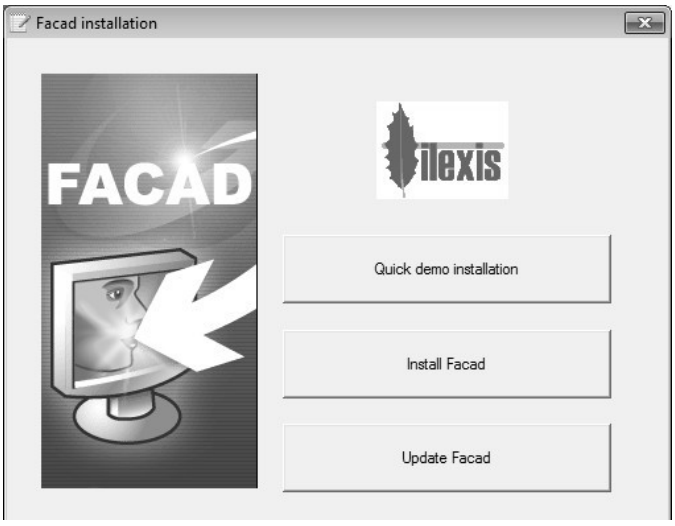
The Facad Installer program is used for installing (and updating) the Facad Ortho Tracing software. Software installation can be performed by users of the software, local IT adminstrators, or by appointed IT companies. The software is distributed through a download link delivered by the producers Ilexis AB, contact your dealer or Ilexis (see contact information at www.facad.com) for more information.

The Installer program consists of 4 different install/update situations:

- Quick demo installation see page 2
- Local installation (on 1 PC only) see page 3
- Server installation (in a shared folder) see page 4
- Update of a Facad installation see page 6

The three installation variants all require you to send a file that contains installation information as an attachment in an e-mail to support@facad.com in order to receive a valid user license for the software Facad.

Regarding update of a Facad installation, there is also a nice solution to update Facad via an Internet connection, contact your dealer or Ilexis.



As an alternative, there is also an MSI installation package available, please contact Ilexis.

Technical requirements and recommendations can be found in *chapter 10*.
For **news in version 3.16**, please read the *Release Notes for FACAD, version 3.16* and the manual *FACAD AI by Bonefinder.*
For **news in version 3.14**, please read the *Release Notes for FACAD, version 3.14.*
For **news in version 3.13**, please read the *Release Notes for FACAD, version 3.13*.
For **news in version 3.12** related to personal login using Active Directory and data archiving, see *chapter 12*.
For **news in version 3.11** related to licensing, multiple patient data areas, and support, see *chapter 13*.

1 Quick demo installation

1.1 Full description

When the Facad Installer program is started, select the button **Quick demo installation**

Facad will then automatically be installed on the local C drive, in the folder C:\Facad

When the installation is done, a file named *FacadInstallationInfo.zip* is saved on your computer's desktop. Send this file as an attachment in an e-mail to support@facad.com together with information about your clinic (clinic name, address, city, and country) in order to receive a time limited demo license.

When the license has been generated, you will be able to download it from the Facad menu **Help>License update**. You will be notified by an e-mail when the license is available for download.

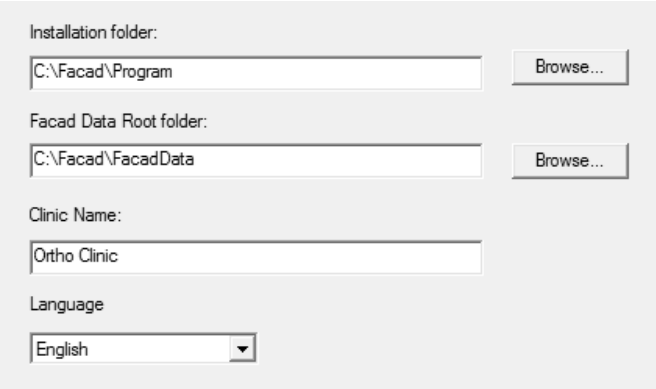
1.2 Quick demo installation – Step by step

1. Start FacadInstaller.
2. Select **Quick demo installation**
3. When the installation is done, send the file *FacadInstallationInfo.zip* (on your computer's desktop) to support@facad.com
   Include clinic information (clinic name, address, city, and country) in the e-mail.
4. Wait for e-mail confirmation that your license is ready for download.
5. Start Facad + **Help>License update**

2 Local installation (on 1 PC only)

1. When the Facad Installer program is started, select the button **Install Facad**
2. Then select the button **Local installation (this PC only)**
3. The ***Installation folder*** is preset to *C:\Facad\Program* and the ***Facad Data Root folder*** is preset to *C:\Facad\FacadData*

   You can choose other folders by using the **Browse** buttons.
   Note! Do not use folder addresses longer than 90 characters.



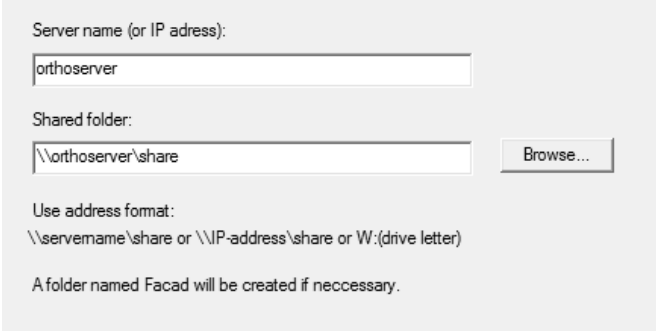
4. Enter the ***Clinic Name*** (this name will be shown on printouts from Facad) and choose the preferred ***language*** for the Facad program.
5. Click **Finish**.
6. Facad will be installed and the data area will be generated in the designated folders.
7. When the installation is done, a file named *FacadInstallationInfo.zip* is saved on your computer's desktop. Send this file as an attachment in an e-mail to support@facad.com together with information about your clinic (clinic name, address, city, and country) in order to receive a valid user license.
8. When the license has been generated, you will be able to download it from the Facad menu **Help>License update**. You will be notified by an e-mail when the license is available for download.

3 Server installation (Facad available from several PC's)

In a server installation, Facad is installed in a shared folder. Make sure that there is a shared folder in the computer network that can be used for the Facad installation.

1. When the Facad Installer program is started, select the button **Install Facad**
2. Then select the button **Server installation (in a shared folder)**
3. Enter the name of the server or it's IP address.
4. Browse to the ***shared folder*** suitable for the Facad installation.
   Use the address format *servername**share* or *IP-address**share* or *W:* (drive letter)

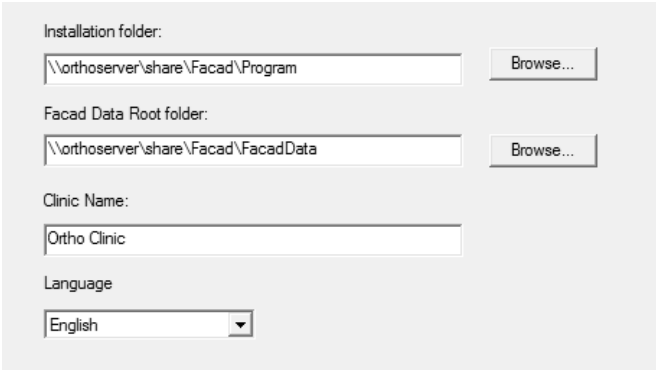
   Note! Do not use an address to the shared folder that is longer than 80 characters.



   Important! If a drive letter is used, make sure it is the same drive letter that is used by the client PC's to address the shared folder. This is to ensure that other PC's in the network can access the Facad program and its data.

5. Click **Next**.
6. Suitable folders are already suggested for the ***Installation folder*** and the ***Facad Data Root folder***.

   You can choose other folders by using the **Browse** buttons.
   Note! Do not use folder addresses longer than 90 characters.



   If several PC's should be able to access the Facad program, copy the *Installation folder* address and paste it in a text file (for instance) for later use.

7. Enter the ***Clinic Name*** (this name will be shown on printouts from Facad) and choose the preferred ***language*** for the Facad program.
8. Click **Finish**.
9. Facad will be installed and the data area will be generated in the designated folders.
10. When the installation is done, a file named *FacadInstallationInfo.zip* is saved on your computer's desktop. Send this file as an attachment in an e-mail to support@facad.com together with information about your clinic (clinic name, address, city, and country) in order to receive a valid user license.
11. When the license has been generated, you will be able to download it from the Facad menu **Help>License update**. You will be notified by an e-mail when the license is available for download.

The Facad program can be accessed from other PC's in the network by running the Facad program once from each PC that should be able to use the program. This is achieved by entering the address to the Facad program in a normal Windows Explorer window (in the address field).
The address to the Facad program is: *Installation folder**Facad**Facad.exe* (the saved *Installation folder* address now comes in handy).

The first time Facad is run on a PC, you will get the opportunity to place a short-cut to the Facad program on the computer's desktop.

User permissions

Make sure that the data area as specified by the **Facad Data Root** folder, typically *ServerName**share**Facad**FacadData* for a server installation, has the appropriate user permissions. Users of the Facad software must have full permission (read, write and modify) for the ***FacadData*** folder and recursively below.

Activity Logging

The activation of activity logging is described in a separate document; *Facad Activity Log Guide* which is found in the folder *Doc* in the *FacadInstallationFolder*, e.g.

```
\\ServerName\share\Facad\Program\Doc
```

4 Update Facad

There is a nice solution to update Facad via an Internet connection. If this on-line solution is not possible or for some reason, not desired – the update function in the Facad Installer program can be used instead.

Important! You need to make sure that the Facad user license is valid also for the new, updated version of Facad. If the license is not valid, Facad will not work after the update. When in doubt, please contact your dealer or Ilexis AB (see contact information at www.facad.com).

If you update a server installation of Facad (in a shared folder), the update needs only to be performed once, since other PC's in the network access the Facad program only by a short-cut to the program.

4.1 Preparation

Make sure that nobody in the local network is using Facad before you start updating Facad.

4.2 Locate the Facad installation

If you are using the same computer as you normally use when working with the Facad software, you do not need to specifically locate the Facad installation.

On the other hand, if you are using a computer that is not commonly used for running Facad, you should locate and run Facad once, before you perform the update.

4.3 Update Facad

When the Facad Installer program is started, select the button **Update Facad**. Facad will then automatically be updated.

Old Facad installations

Facad installations older than version 3.0 should not be updated to 3.13. The old program installation should instead be removed (do not remove Facad data) and a new installation should be made.
Please, contact the manufacturer Ilexis AB for support regarding updating really old installations.

4.4 Support information

As a final step, please select the Facad menu item **Help>Technical Support** and **Save** a support file to (for instance) the Windows Desktop. Email this support file *Support_...zip.encrypted* to support@facad.com
This gives us information about your Facad installation so that we easier can support you.

5 Installation validation

To validate that the software Facad has been successfully and correctly installed/updated, please perform the validation steps in the check-list in the document *FacadInstallationValidation.pdf* that is found in the folder *FacadInstallationFolder\Doc\Installation*

6 FACAD – Intended use

Facad® is a software program used for orthodontic tracing, cephalometric analysis, and visual diagnostic imaging, as well as for treatment planning with soft tissue profile prediction for both orthodontics and maxillo-facial surgery.

This software product is a support tool intended to be used by trained orthodontists and orthofacial surgeons.

7 Facad User's Guide

The User's Guides are found in the Facad software, standard menu ***Help>Manuals>User's Guide>...*** and can also be downloaded from Internet address: *www.facad.com/dox*

8 Labels in the Facad software

The following labels are used in the Facad software product:

	CE mark – certificate for medical device regulation (EU) 2017/745 (MDR)
	Medical Device
	Unique Device Identification: (01)7300009081448(8012)3.16.x.yyyy
	Producer and producer's address: *Ilexis AB, Blåklintsgatan 4, SE 582 46 Linköping, Sweden*
	Read instructions (this *User's Guide*) before use *http://www.facad.com/dox*

9 Uninstalling the software

If the Facad software is not going to be used any more, the installation folder tree can simply be deleted. No uninstallation software needs to be run.

10 Technical requirements and recommendations

Installations

The Facad Ortho Tracing software can either be installed

- locally on a PC — recommended for single usage on an appointed workstation, licensed with a fix license
- in a shared folder on a server — recommended for usage from more than one workstation, licensed with a fix license valid for each workstation, or with a floating license valid for simultaneous usage from several workstations

When the software is installed in a shared folder on a server, no local installations should be made – you only need a short-cut to the installed program. This short-cut is created by the program itself the first time it is run.

Operating systems

The software works on workstations (PC's) running operating systems **Windows 11**.

Microsoft .NET Framework 4.7.2 is required for the Facad program to work.
Here are download links to .NET 4.7.2: https://go.microsoft.com/fwlink/?LinkId=863262 or https://dotnet.microsoft.com/en-us/download/dotnet-framework/thank-you/net472-web-installer

The runtime library **Microsoft Visual C++ Redistributable v14** is required for the Facad program to work. This runtime library is included in the installation and update programs for Facad.

Memory and disk space

The installation requires less than 260 MB free disk space and the minimum memory requirement is 1 GB RAM.

Databases

No databases are involved in this software.

Network card

A network card needs to be available in the workstation for the software to work.

Image file formats

The software can handle the following image file formats: JPEG, TIFF, PNG, BMP, GIF, and DICOM.

Recommendations for accurate viewing

- Color display with at least 24-bit performance
- Display resolution at least 1280x720

High screen resolution

On laptops and image displays with a very high resolution, Windows applies display scaling that in some cases might result in undesired *fuzzy fonts* or really tiny icons and text sizes. This functionality can be set to work better by adjusting the executable's properties (right-click on *Facad.exe* and select *Properties*).

Windows 11

Go to the *Compatibility* tab, and click the *Change high DPI settings* button.
Enable the check-box *Use this setting to fix scaling problems for this program instead of the one in Settings*. Under the *High DPI scaling override* section, enable the *Override high DPI scaling behavior* checkbox. Finally, select the *System* option in the drop-down *Scaling performed by:*

If you are running an older Windows version (which you shouldn't), it looks slightly different:

Windows 10

Go to the *Compatibility* tab, and check the check-box *Override high DPI scaling behaviour. Scaling performed by:* and select *System* in the drop-down.

Windows 8.1 and older Windows 10

Go to the *Compatibility* tab, and check the check-box *Disable display scaling on high DPI settings*.

11 Local IT responsibilities and cybersecurity

It is the system administrator's responsibility to:

- activate activity logging in Facad (see chapter 14),
- activate personal login using Active Directory in Facad (see chapter 12),
- manage archiving and disposing of patient data, using for example FacadArchiver (see chapter 12),
- activate the optional functionality for patient integrity and encryption (see chapter 13),
- manage data backup of Facad data regularly,
- manage malware detection and protection.

It is the user's responsibility to:

- exit Facad and/or logoff Windows when leaving the computer unattended. There is no automatic logoff functionality in Facad,
- anonymize patient data when exporting.

12 News in version 3.12

Personal login using Active Directory

To increase security, it is possible to activate a login function for Facad. This function uses the Microsoft directory service called *Active Directory (AD)*, which must be running on a Windows server in the network.

To set up the login possibility in Facad, read the manual *AD-Login.pdf* found in the folder *Doc\Installation* in the *FacadInstallationFolder*, e.g.

```
\\ServerName\share\Facad\Program\Doc\Installation
```

Archiving and disposing of patient data (FacadArchiver)

It is now possible to archive and dispose of older Facad data. This functionality is implemented as a stand-alone program called *PatientArchiver* and is meant to be used by IT administrators only.

The archiving program *PatientArchiver.exe* is found in the same folder as *Facad.exe* and the manual for operating this program – *Facad Patient Archiver Manual.pdf* – is found in the folder *Doc* in the *FacadInstallationFolder*, e.g.

```
\\ServerName\share\Facad\Program\Doc
```

Calling Facad with a DICOM image file as command-line option

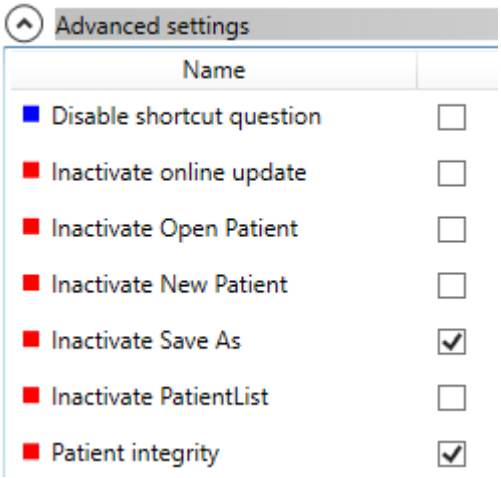
Facad can now be started with a DICOM image file name as a command-line option, which creates/opens the Facad patient that the DICOM image belongs to and imports the image automatically.
This method is used to link to Facad by e.g. OnePix 2 and Dürr Vistasoft imaging software.

The calling format is: **`Facad.exe`** "*<address-to-DICOM-image-file>*"

13 News in version 3.11

Patient integrity

As a way to comply to GDPR (General Data Protection Regulation), there is now a possibility to turn on patient integrity mode in Facad with a setting (*PatientIntegrity*) in *Facad.Admin.settings.*
Use the program *Configuration.exe* to set this setting (**Patient integrity**).



Hide patient information when naming files and folders

If the patient integrity mode in Facad is turned on, the patient's information (ID and names) is hidden when naming files and folders during creation of new patients, thus files and folders are named without any use of the patient's ID and name.

Encryption of patient data

It is now possible to encrypt Facad data when new patients are created. To enable this feature, the patient integrity mode in Facad must be turned on as above, and an extended user license for the Facad software is required. This extended user license is not included in existing support agreements and needs to be purchased separately.

Ilexis AB also offers the service to encrypt data and rename all files and folders in existing Facad data structure following the same principle.

Please contact your local Facad dealer or the producer Ilexis AB in this matter.

License file

The license file *license.fcl* is no longer required to be present in the same folder as *Facad.exe* – now the license file must instead be stored in the *License* folder situated in the *Patient Data Root* folder (which is most often the parent folder of the *Patient Data Node* folder).

Program settings and the windows registry

The Window's registry is no longer used to maintain settings for the Facad program.

Local user settings are now stored and maintained in the local user folder *C:\Users\username\AppData\Roaming\Ilexis (Facad.settings)*

Administrator settings for Facad (not to be changed by the users) are stored in the file *Facad.Administrator.settings* located in the same folder as *Facad.exe*, which also means that the *Facad.ini* file is not used any more. These administrator settings are handled by the program *Configuration.exe*

Multiple patient data areas (multiple clinics)

The way to maintain multiple patient data areas has been changed. If several clinics (or departments) are sharing the same Facad installation, each "clinic" should get an entry in the file *Facad.Administrator.settings* (see above). Each clinic specific setting is identified by a number (see tags <Id> in the example below).

```
  <Clinics>
  <ArrayOfClinic>
  <Clinic>
    <Id>1</Id>
    <Name>Satellite clinic</Name>
    <ClinicName>Satellite Orthodontics</ClinicName>
    <Node>\\servername\FacadData\Patients_SAT</Node>
  </Clinic>
  <Clinic>
    <Id>2</Id>
    <Name>Main Hospital Surgery</Name>
    <ClinicName>Maxillo-Facial Dept</ClinicName>
    <Node>\\servername\FacadData\Patients_MAX</Node>
  </Clinic>
  <Clinic>
    <Id>17</Id>
    <Name>Main Hospital Orthodontics</Name>
    <ClinicName>Orthodontic Dept</ClinicName>
    <Node>\\servername\FacadData\Patients_ORTHO</Node>
  </Clinic>
</ArrayOfClinic>
</Clinics>
```

The way to start Facad with a clinic specific setting is to specify the id-number as a parameter when calling Facad.

`Facad -c1`	start Facad using the settings for clinic having <Id>=1
`Facad -c17`	start Facad using the settings for clinic having <Id>=17
`Facad -c#`	start Facad using the settings for clinic having <Id>=#

14 Troubleshooting

14.1 Logging

Log files are normally written to the following folder:

C:\User\<user name>\AppData\Roaming\Ilexis\LogFiles

Each program and plugin program write their own log file (e.g. *Facad.log*). Log files older than "today" get file names appended with the date they were created (e.g. *Facad.log.2016-09-01*). If a log file gets larger than 1MB it's name is appended with number (*e.g. Facad.log.1*) and a new log file is started. Log files older than 100 days are deleted automatically.

Detailed logging

You can configure the level of logged messages. The simplest way to turn on a higher level of logged messages is to tick the menu item **Help>Activate detailed logging**. All messages including debug messages will then be logged during that specific Facad session. Restarting Facad resets the log level to the specification in *Facad.exe.config*

To control the level of logged messages in more detail, you need to edit the "config" file for each respective program (e.g. *Facad.exe.config*). It is also possible to redirect where the log files are written, use the *LogPath* value for that.

```
<?xml version="1.0" encoding="utf-8" ?>
<configuration>
...
  <appSettings>
...
  <!-- LogLevel alternatives: Off Error Warn Info Debug All -->
  <add key="LogLevel" value="Info"></add>
  <!-- LogPath: default= Users\XX\AppData\Roaming\Ilexis\LogFiles -->
  <add key="LogPath" value=""></add>
  </appSettings>
</configuration>
```

Log levels:

Level	Messages logged
All	All
Debug	All
Info	Error, warning, and information
Warn	Error and warning
Error	Error
Off	Nothing

Activity Logging

The activation of activity logging is described in a separate document; *Facad Activity Log Guide* which is found in the folder *Doc* in the *FacadInstallationFolder*, e.g.

```
\\ServerName\share\Facad\Program\Doc
```

14.2 Slow Facad startup on workstations without Internet access

If you encounter a very slow startup (30-40 seconds) of Facad on computers without Internet access, this may be due to a Windows bug that causes the Authenticode signature to be verified every time an application is started. This is a known cause for long delays when no internet connection is available.

To work around it, make sure that the file *Facad.exe.config* contains the following lines

```
<configuration>
  <runtime>
    <generatePublisherEvidence enabled="false"/>
  </runtime>
...
</configuration>
```

This configuration file is found in the same folder as the application *Facad.exe* itself.

If you still encounter a very slow startup, try to set some registry keys according to the article:
http://rusanu.com/2009/07/24/fix-slow-application-startup-due-to-code-sign-validation

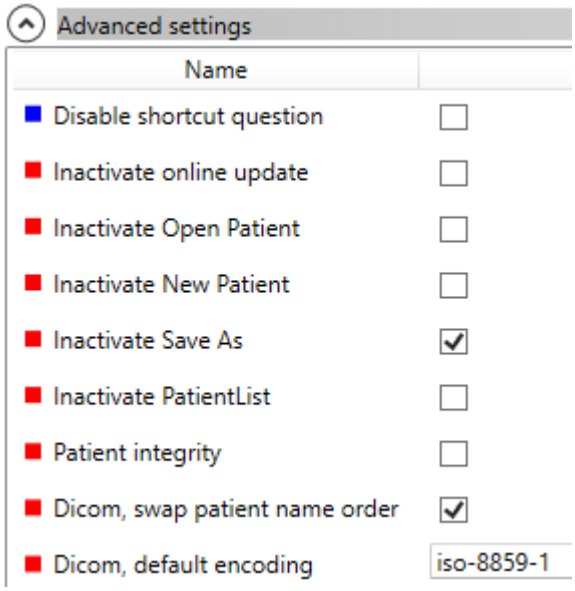
Set the registry key *ChainUrlRetrievalTimeoutMilliseconds* to 200 and *ChainRevAccumulativeUrlRetrievalTimeoutMilliseconds* to 500

These registry keys are found in
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Cryptography\OID\EncodingType 0\CertDllCreateCertificateChainEngine\Config

14.3 DICOM images with wrong character encoding

There are imaging software that export DICOM images with the wrong character encoding, making special characters (such as å, ä, ö, æ, ø) appear strangely. This can be rectified by making use of a setting (*DicomDefaultEncoding*) in *Facad.Admin.setting* to apply a specific character encoding for DICOM images.

Use the program *Configuration.exe* to set this setting (**Dicom, default encoding**).



14.4 DICOM images with wrong name order

There are imaging software that export DICOM images with the wrong order of names in the full patient name (first name first, instead of the last name). This can be modified by making use of a setting (*DicomSwapPatientNameOrder*) in *Facad.Admin.setting* to switch the name order.

Use the program *Configuration.exe* to set this setting (**Dicom, swap patientname order**).

14.5 Facad fails to start (rarely)

Facad fails to start under Windows 11 or Windows 10 very rarely. By setting the compatibility mode on *Facad.exe* to Windows 8, it starts better.