

# EzDent-i

## User Manual

Version : 3.1

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• ENGLISH



## Introduction

This manual provides detailed information on how to use EzDent-i. This document may not be reproduced in any manner without the prior written consent from the publisher.

It is recommended that users read this user manual thoroughly before using the program in order to learn the installation of EzDent-i S/W and the functions of the operating system.

For supplementations, this manual is subject to change without prior notice. A printed manual distributed along with the product may not include contents specific to the latest version of the product. For additional information pertaining to this manual and the product, please contact us at:

### Contact Information

- Website : <http://www.ewoosoft.com/>
- TEL: +82-1588-9510

### About this document:

- Manual Name : EzDent-i User Manual
- Publication Date : May 2020
- Manual Version : 3.1
- Relevant EzDent-i Version : 3.1


### User Notification

- This manual is subject to change without prior notice for supplementation.
- Several functions of EzDent-i might be limited to use depending on countries and languages.
- This document may not be reproduced in any manner without the prior written consent from the publisher.
- To maintain seamless operation, user must read and follow the instructions prior to using EzDent-i.
- For the optimal use of EzDent-i, the user must comply with the system requirements.
- When transferring patient data such as images or information, laws and regulations on personal information in the country of use must be obeyed.


**Product Information**

**Product: Dental Imaging Processing Software For X-ray System**

**Model: EzDent-i**

 801-ho, Vatechnetworks Bldg.,13, Samsung 1-ro 2-gil, Hwaseong-si, Gyeonggi-do, Korea  
 Manufacturer **Ewoosoft Co., Ltd.**

**Website : www.ewoosoft.com    MADE IN KOREA**

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**VATECH Global France SARL.**




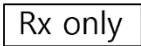



 **Serial No. : Marked On The Product**

**Software Version : Marked On The Product**



**Standard**

EzDent-i complies with the following international standards and regulations.

	Manufacturer
	Authorized representative in the European County.
	Serial Number
	Prescription only
	CE Marking
	Caution
	Consult Instructions for Use

The prescription use statement as required by 21 CFR 801.109(b)(1)

“Caution: Federal Law restricts this device to sale by or the order of a physician or any other practitioners licensed by the law of the state in which that person practices to use or order the use of the device.”

**Unique Device Identification (UDI)**



(01)08800019700197

### Cyber Security

Before installing the EzDent-i you must follow the instructions below for cyber security.

The instructions help to protect the program against cyber security threats such as viruses and malware.

- Prior to installing and using EzDent-i, scan your computer system with anti-virus and anti-spyware programs from a trusted source.
- Install, set up and enable adequate anti-virus software.
- Maintain up-to-date anti-virus software.
- Make sure that your OS has the latest security updates applied.
- Turn on your PC's firewall.
- Windows Vista, 7, 8 or higher has a built-in firewall that is turned on by default.

If you have any cyber-security-related concern or problem, please contact our customer support on the phone or via e-mail at the contacts listed below:

- Tel.: +82-1588-9510
- E-mail: [gcs@vatech.co.kr](mailto:gcs@vatech.co.kr)
- Website: <http://www.ewoosoft.com/>

## Main Features of EzDent-i

EzDent-i is a dental imaging software solution that stores, analyzes and helps in the process of diagnosing patient images that have been acquired through VATECH dental equipment.

- Manage Patient Information
- Capture and store intraoral X-ray images.
- Provide tools for image processing and View function for Patient image view
- Process images to enhance their diagnostic value with dental-specific tools and consultation animations.
- Create a record with patient images in Report Mode.

EzDent-i can be used in a networked environment. If EzDent-i is installed in several computers, the patient and image database can be shared among them and used on different workstations.

### Indications for Use

EzDent-i is a dental imaging software that is intended to provide diagnostic tools for maxillofacial radiographic imaging. These tools are available to view and interpret a series of DICOM compliant dental radiology images and are meant to be used by trained medical professionals such as radiologist and dentist.

EzDent-i is intended for use as software to acquire, view, save 2D image files, and load DICOM project files from panorama, cephalometric, and intra-oral imaging equipment.

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# Chapter 1. Installing EzDent-i

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## 1. What is EzDent-i?

EzDent-i is a Dental Imaging Software that enables users to save, manage, diagnose, and acquire patients' images. EzDent-i is equipped with management and processing system for various images. Images can be acquired directly from equipment that EzDent-i currently supports. In addition, images can be imported from other digital sources.

## 2. PC System Specifications for EzDent-i

- Recommended Server PC specifications
  - CPU: Intel Core i5-7600 @ 3.50GHz or higher
  - RAM: 4GB or more
  - HDD: 1TB or more
  - OS: Windows 10 or later
  - Display: 1280 x1024 or higher
  - Wired Network : 1G ethernet LAN (CAT 5E cable) or higher
  - Wireless Network : 802.11ac or higher
- Minimum Server PC specifications
  - CPU: Intel Core i3-4150 @ 3.50GHz
  - RAM: 2GB
  - HDD: 500GB
  - OS: Windows 7
  - Display: 1280 x1024
- Recommended Client PC specifications
  - CPU: Intel Core i3-2100T @ 2.50GHz or higher
  - RAM: 4GB or more
  - HDD: 15GB free space or more
  - OS: Windows 10 or later
  - Display: 1280 x1024 or higher
- Minimum Client PC specifications
  - CPU: Intel Core2 Duo E7200 @ 2.53GHz
  - RAM: 2GB
  - HDD: 11GB free space
  - OS: Windows 7
  - Display: 1024 x768




## 3. Installation

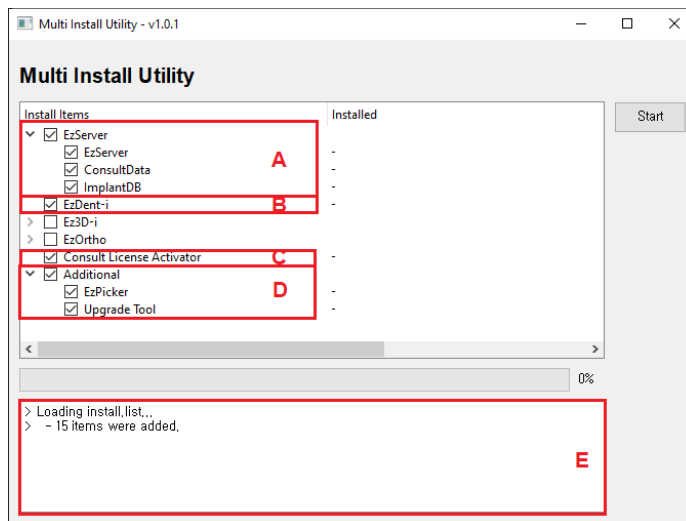
### 3.1 Installation of EzServer

To use all functions of EzDent-i v3.1, installation of EzServer v4.1 or higher is required. The version of server can be viewed from the name of server installation file.

1. Execute MultiInstallUtility.exe to install EzServer and Ez3D-i for Windows. The prompt for selecting installation mode will be shown

 MultiInstallUtility.exe

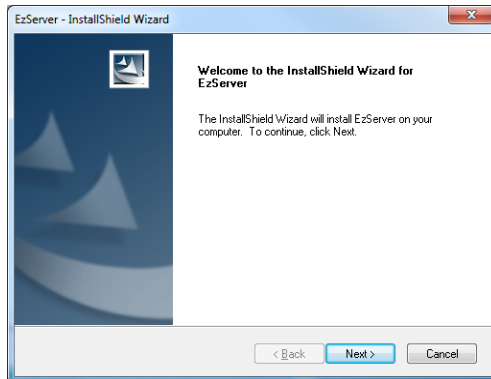
2. Multi Install Utility window for selecting installation mode will be shown.



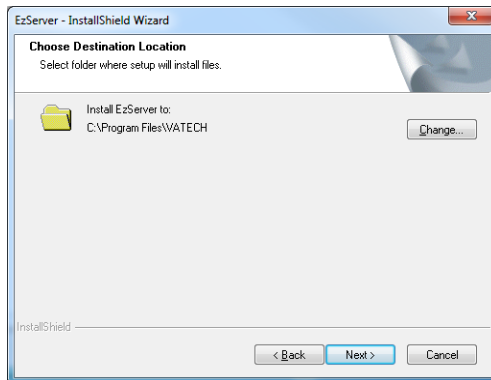
- In section A, users can select and install options on EzServer.
  - In section B, users can install EzDent-i.
  - In section C, users can activate the Consult License.
  - In section D, users can install EzPicker or UpgradeTool.
  - In Section E, users can view the installation progress.
3. After selecting programs to install, click the [Start] button.

### 3.1.1 [Server] Installation of EzServer

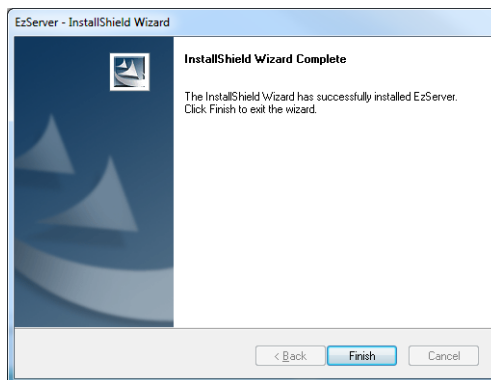
1. Once the installation is started, click the [Next] button.



2. Set the destination location of the program. It is recommended that you use the default path and click the [Next] button to proceed.



3. When EzServer is completely installed, click the [Finish] button to complete installation.

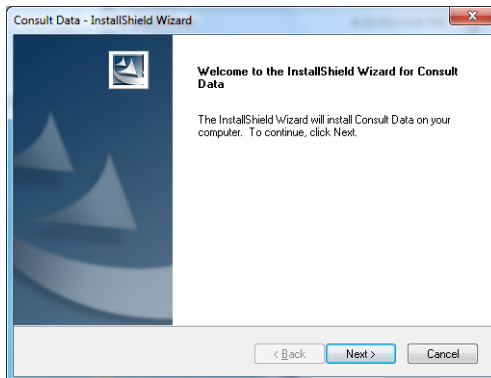


PostgreSQL program is automatically installed when the user installs EzServer but is not uninstalled automatically when EzServer is uninstalled. Please unistall PostgreSQL separately when needed.

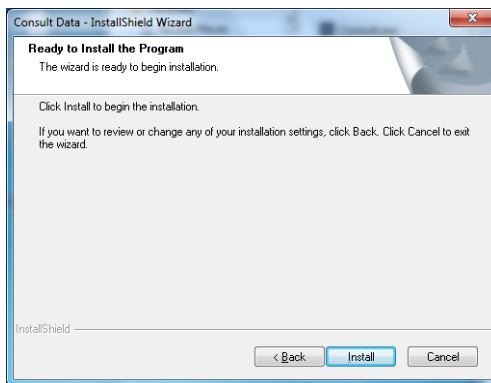
4. When the installation of EzServer is complete, the other components will automatically start installing. If users did not select any other components, the installation is finished

### 3.1.2 [Server] ConsultData installation

1. To install Consult Data, click the [Next] button.



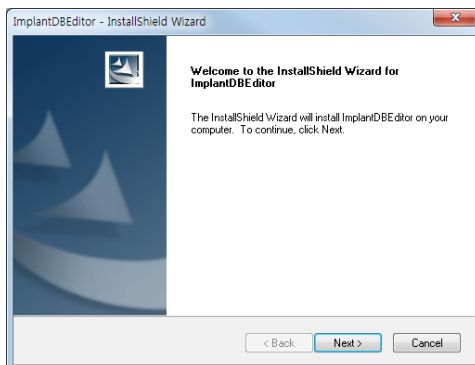
2. To continue click the [Next] button, followed by the [Install] button to proceed.



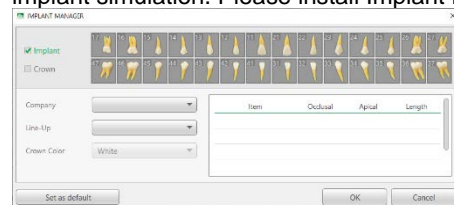
3. When the installation of Consult Data is complete, click the [Finish] button.

### 3.1.3 [Server] ImplantDB Editor installation

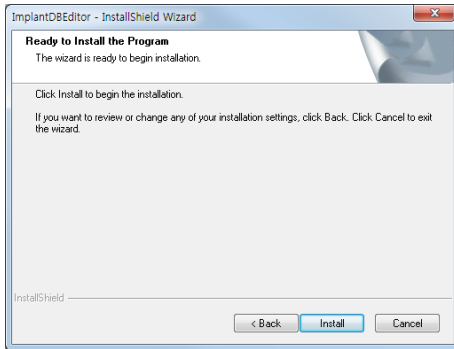
1. To install ImplantDB, click the [Next] button.



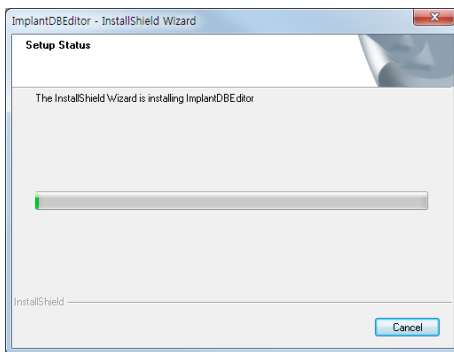
If Implant DB is not installed, the list of implant model cannot be seen while conducting implant simulation. Please install Implant DB to use implant simulation function.



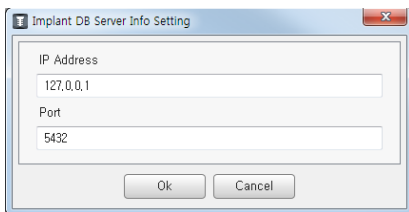
- Click the [Install] button to start installation.



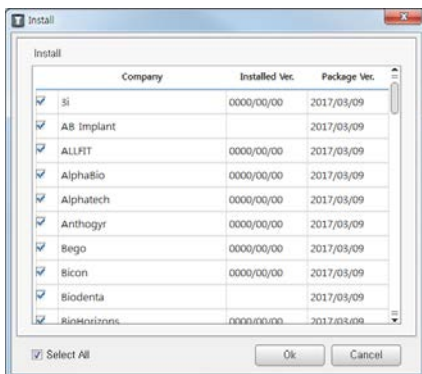
- Please wait until the installation process is complete.



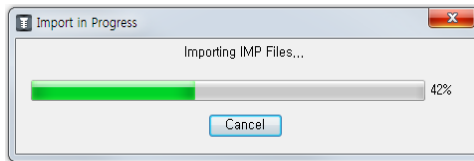
- Enter the IP address and port number for Implant DB Server.



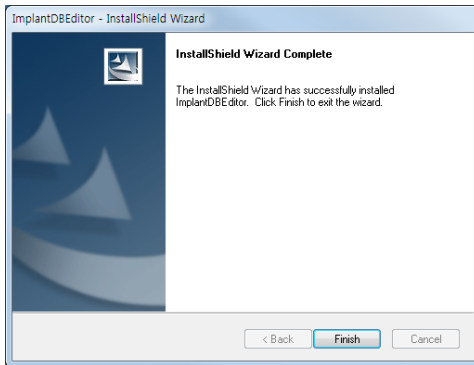
- Please select company/companies you want to install. By checking [Select All], you can install all implant models of all companies ImplantDB provides.



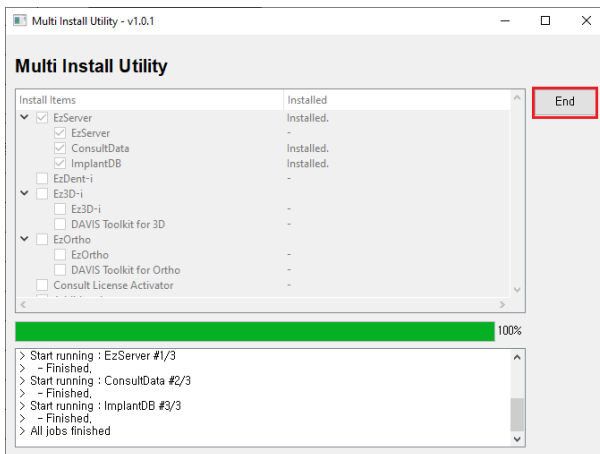
6. Please select [OK] to process installation.



7. Please click [Finish] to complete the installation of ImplantDB Editor.



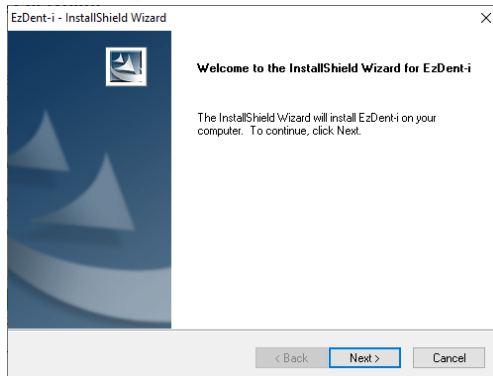
8. Click the [End] button to close Multi Install Utility window.



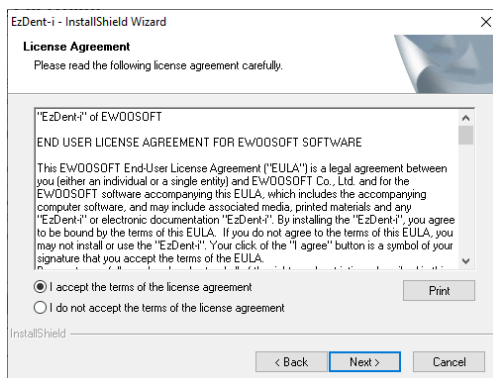
## 3.2 Installation of EzDent-i

### 3.2.1 [Client & Console] EzDent-i installation

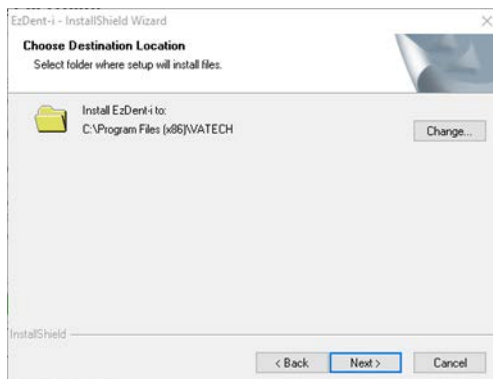
1. When installing EzServer and EzDent-i coincidentally, the installation of EzDent-i automatically starts. When installing EzDent-i only, click the EzDent-i button in section B and click the [Start] button.
2. Click the [Next] button to start the installation when the InstallShield Wizard window appears.



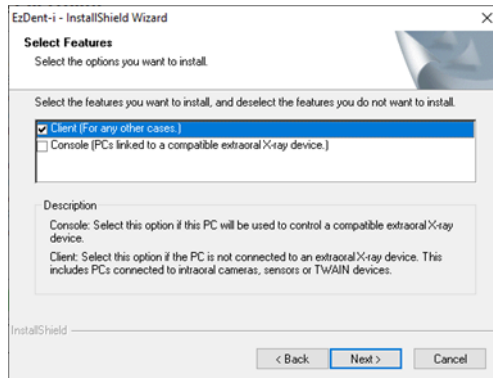
3. The 'License Agreement' window will be shown. If the conditions are acceptable, select [I accept the terms of the license agreement] and click [Next] button.



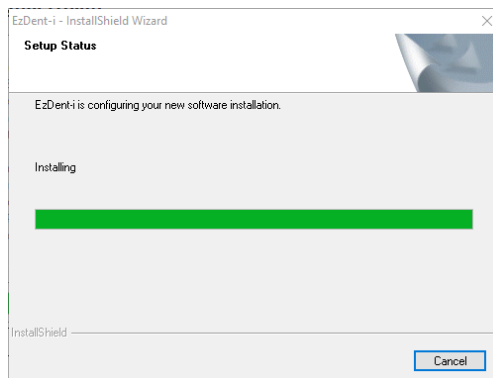
4. After specifying the location to install the program, click the [Next] button to go forward.



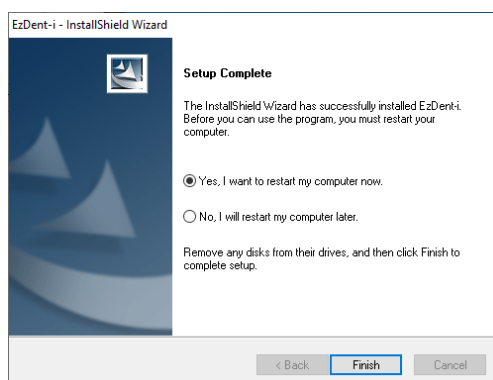
5. Select the type of EzDent-i you would like to install.
  - If users need to acquire images from Extra-oral imaging system such as Pano, Ceph or CT, select [EzDent-i Console] and click the [Next] button.
  - If users need to acquire images from Intra-oral imaging system such as IO Sensor or IO Camera, select [EzDent-i Client] and then click the [Next] button.



6. The installation is automatically progressed.



7. After installation of EzDent-i Console is complete, select [Yes, I want to restart my computer now] and click the [Finish] button. Then, the PC will be restarted.



It is highly recommended to restart the PC to apply system changes resulted from the installation.

## 4. Updating EzDent-i

### 4.1 Updating EzServer


The following section describes the update process for EzDent-i Server.

To update, double click and open the provided executable files.

- To update DB (Database) or File Server, Open EzServer.exe relevant with operation type of PC.

 EzServer(x86).exe

- To update Consult Data, open ConsultData.exe.

 ConsultData.exe

- To update ImplantDB, open ImplantDB.exe.

 ImplantDB.exe




For the more information in details, please contact to Customer Support Center of VATECH.

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### 4.2 Updating EzDent-i

To update EzDent-i in a client or console PC, execute the EzDent-i.exe. Follow the installation method for the subsequent steps.

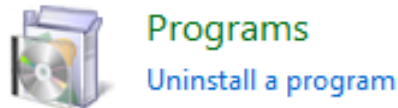
 EzDent-i.exe



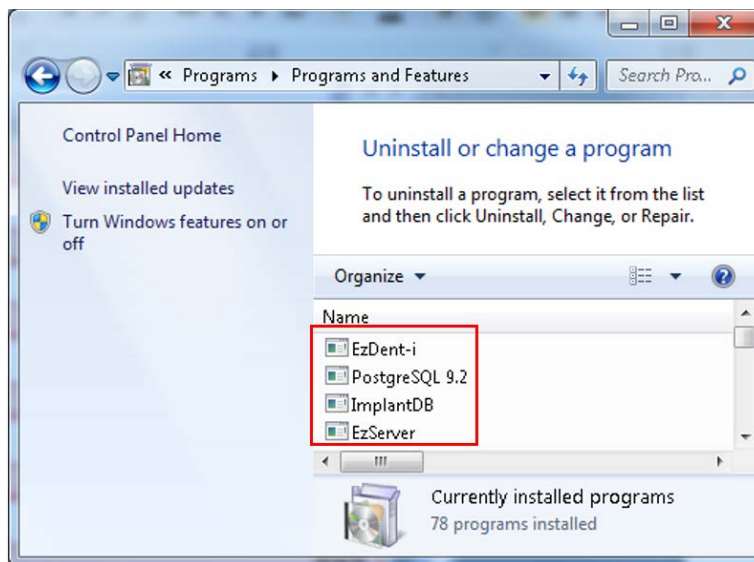
## 5. Uninstalling EzDent-i

To uninstall EzDent-i:

1. Click the Start button on the following window.
2. Click [All Programs] and then click [Control Panel]. Click [Uninstall a program].



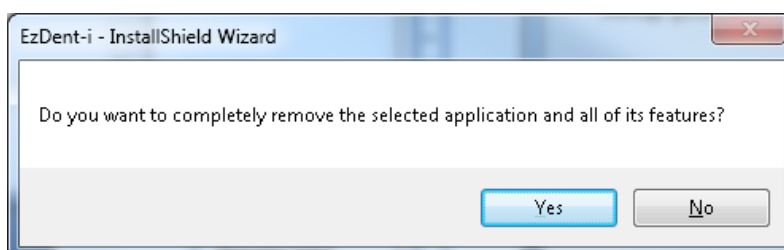
3. User can verify the programs related with EzDent-i such as EzDent-i, PostgreSQL 9.2, Implant DB, EzServer and ConsultData. Double click one by one and uninstall the programs.



4. First, Double click EzDent-i and then select [Yes] button to proceed to uninstall.



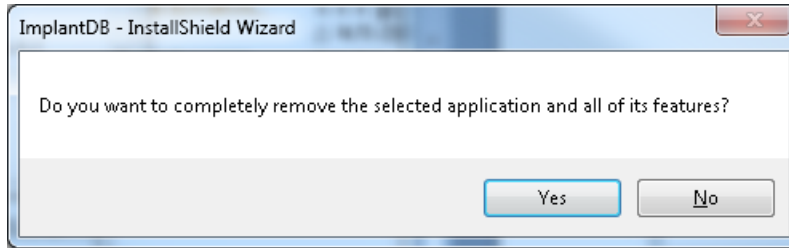
5. When the message appears to verify if user wants to delete the program or not, click the [Yes] button.



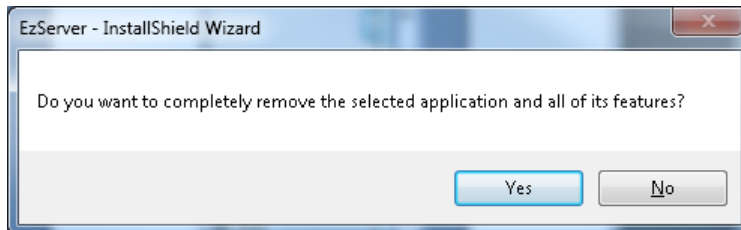
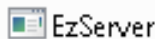
6. When EzDent-i uninstallation is completed, click the [Finish] button.
7. To continue uninstalling EzDent-i, go back to [Uninstall Program] and Double click ImplantDB



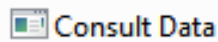
8. Select the [Yes] button to proceed to uninstall.



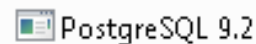
9. When ImplantDB uninstallation is completed, click the [OK] button.
10. To continue uninstalling EzDent-i, go back to [Uninstall Program] and Double click EzServer and then, select the [Yes] button to proceed to uninstall.



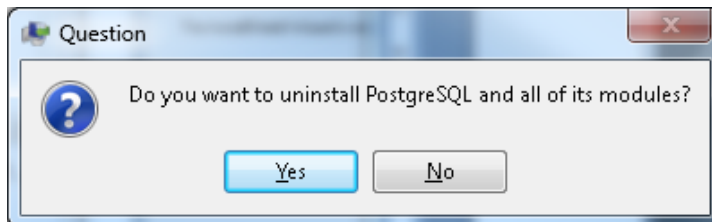
11. When EzServer uninstallation is completed, click the [Finish] button.
12. To continue uninstalling EzDent-i, go back to [Uninstall Program] and Double click ConsultData.



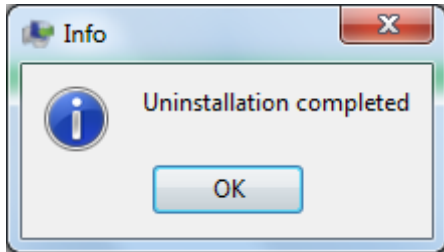
13. Select the [Yes] button to proceed to uninstall.
14. When ConsultData uninstallation is completed, click the [Finish] button.
15. To continue uninstalling EzDent-i, go back to [Uninstall Program] and Double click PostgreSQL 9.2.



16. Select the [Yes] button to proceed to uninstall.



17. When PostgreSQL 9.2 uninstallation is completed, click the [OK] button.



18. When Consult Data uninstallation is completed, click the [Finish] button. Once the programs such as EzDent-i Client, Implant DB, Consult Data, EzServer, PostgreSQL 9.2, are uninstalled, EzDent-i is completely uninstalled.
19. After uninstalling EzDent-i, it is highly recommended to restart the PC.

## 6. License Activation

To use EzDent-i normally, activate the license. To activate the license, three options are given.

- Dongle Key User (Regular User)

I will activate my license with USB Dongle Key.  
(For regular users)

→ Select the dongle key option for successful authentication of the EzDent-i product. The Internet connection is not required when using the USB dongle key.

- License Key User (Regular / Demo User)

I will activate my license with License Key.  
(For regular or demo users)

→ Select the license key option to authenticate the EzDent-i product or its demos. It can be used only where an internet connection is available.

- Trial Version User (Trial User)

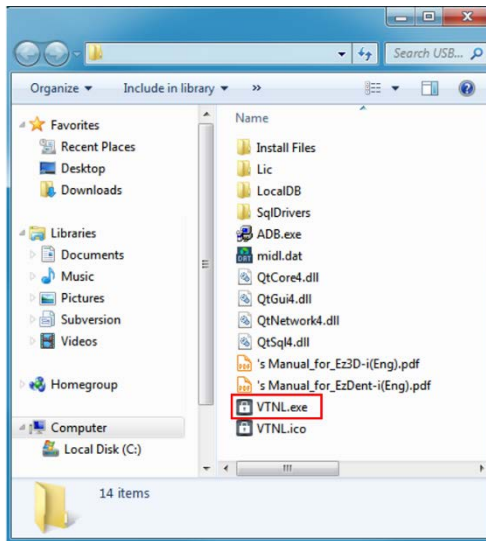
I will try this software.  
(For Trial Users : days left until it expires(30))

→ If you do not have either one of these two keys, select the trial option to test the EzDent-i product for 30 days. It can be used where an internet connection is not possible.

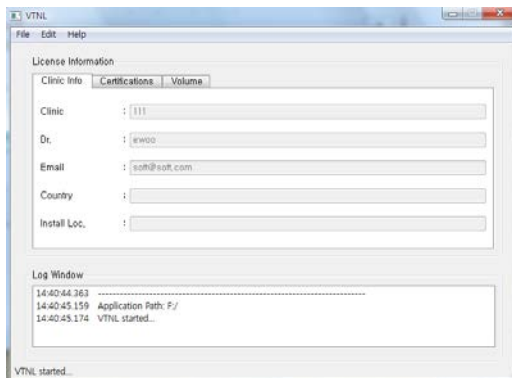
Refer to the following sections to activate the three license options above.

## 6.1 For Regular Users: Activating License with a USB Dongle Key

1. Connect the USB Dongle Key to the PC, and open VTNL.exe



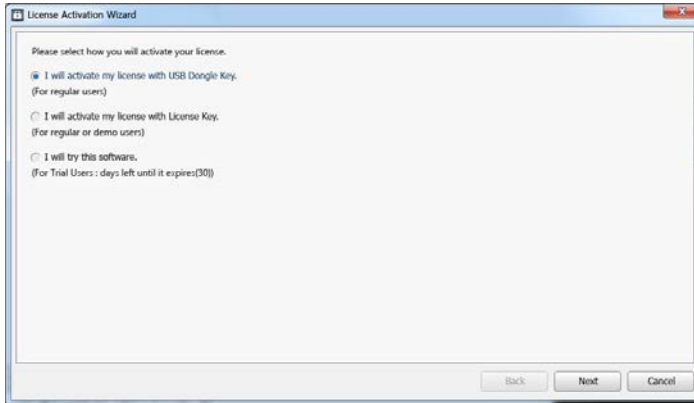
2. To open VTNL program, install ADB.exe file first. If the executable file is not installed, the installation process of ADB program will automatically start when opening VTNL program.



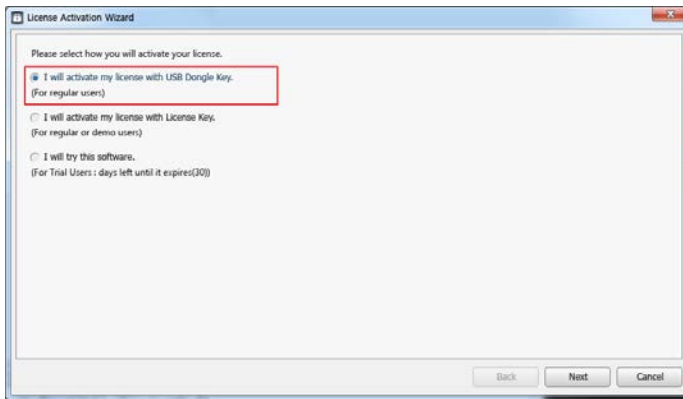
3. Open EzDent-i.



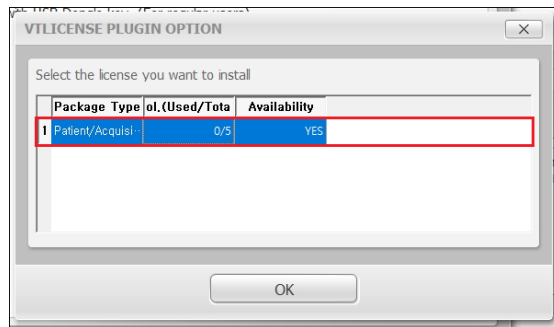
- The following [LICENSE ACTIVATION WIZARD] window appears if you have not activated a license previously.



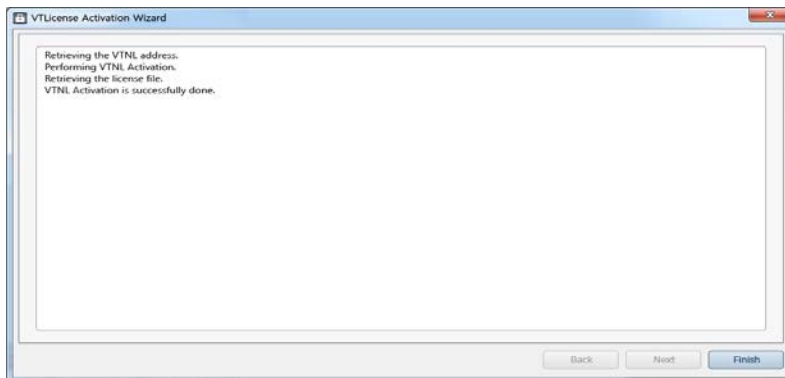
- Select the dongle key (first) item, and then click the [Next] button.



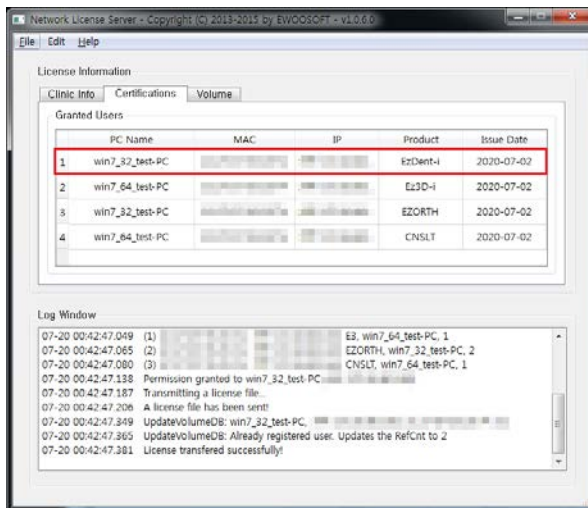
- When the following [VTLICENSE PLUGIN OPTION] window appears, select the license key from the list and install by clicking the [OK] button.



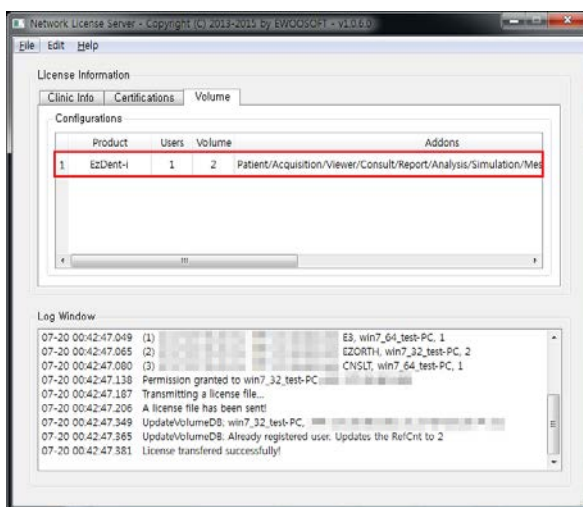
- After clicking the [OK] button, the following [VTLicense Activation Wizard] window appears. Once the license has been activated, click on the [Finish] button to complete your activation. EzDent-I will then run automatically.



- Once the license has been activated, the user's PC will appear on the list of [Certifications] in the [VTNL] window.



- The dongle license key number appears on the list of [Volume] in the [VTNL] window.

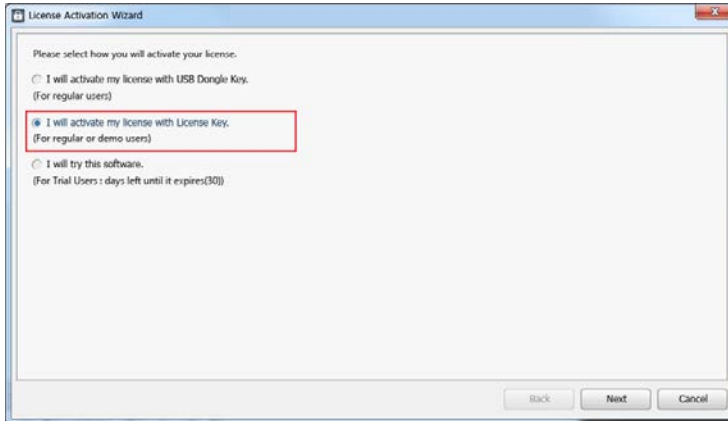


## 6.2 For Demo Users, Activating License with a License key

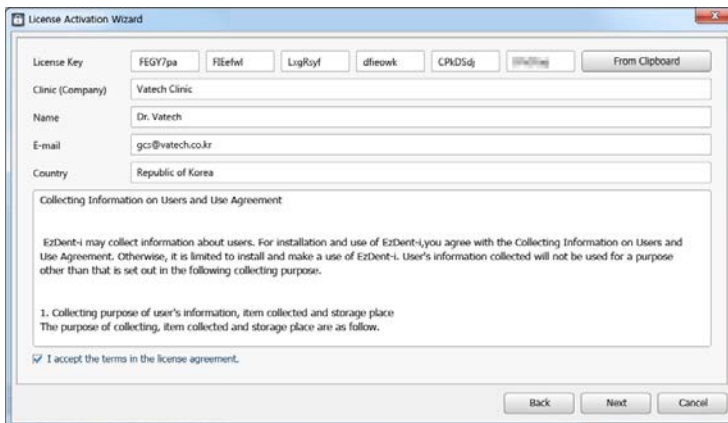


For activating license using the license key, an internet connection must be available with the PC.

1. Select the second option from the [LICENSE ACTIVATION WIZARD] window.



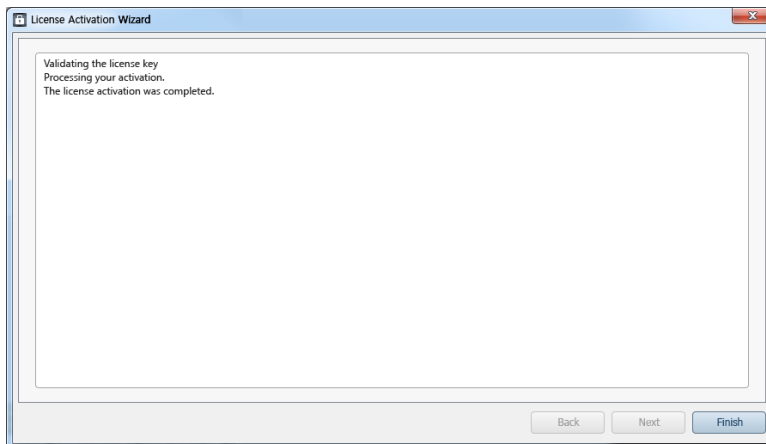
2. Enter the EzDent-i user information and license key provided. And then click the [Next] button. You must enter more than 3 characters to activate the [Next] button.



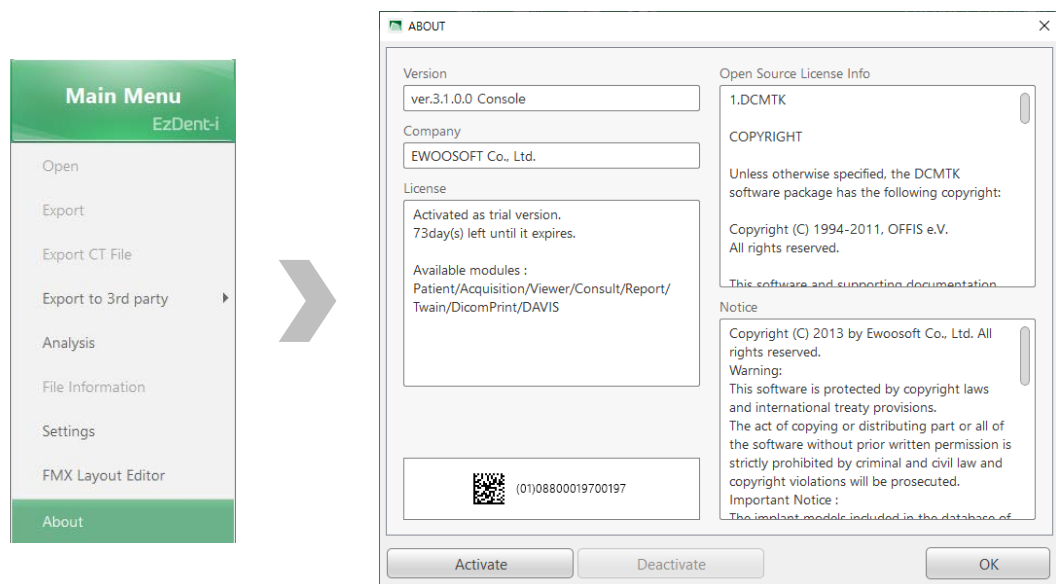
3. Copy the license key with <Ctrl+C> keys, and click the [From Clipboard] button for easier input.



4. Upon the successful activation, the [LICENSE ACTIVATION WIZARD] window will appear, including the remaining days. Click the [Finish] button to end the activation.

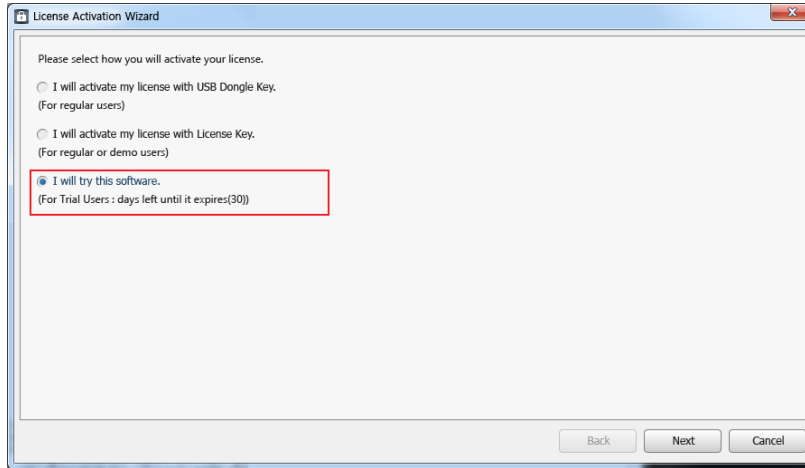


5. Restart EzDent-i after the license activation.
6. The user can check the information of the license by clicking [Main menu > About].



## 6.3 30 Day Trial Users

1. Select the third option in the [LICENSE ACTIVATION WIZARD] window and click the [Next] button.



2. Your 30 day trial version of EzDent-i will begin.

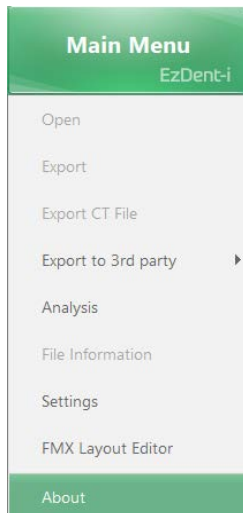


When 30 days have passed, the user needs to activate the dongle key license or demo license again. If user doesn't have a license, please contact a customer support center of Vatech.

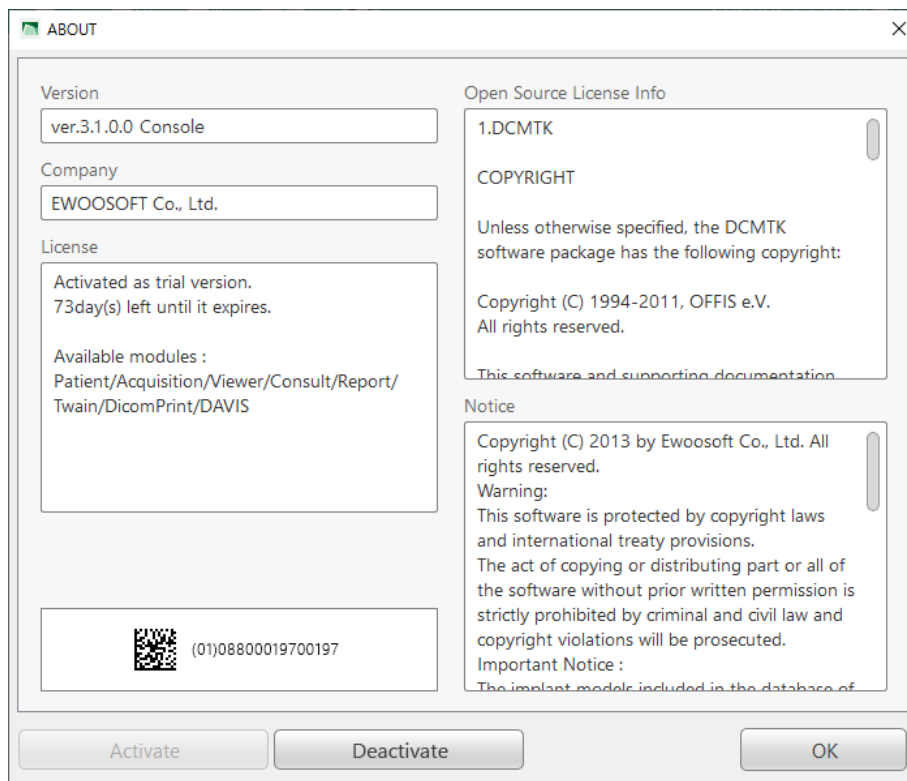
## 7. License Deactivation of EzDent-i

Only legal users can deactivate the licenses. The number of users is limited with one license. So if more licenses are required, users must deactivate the current license. Perform the following steps to deactivate.

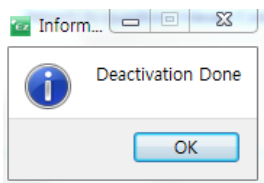
1. Click the EzDent-i main button outlined below. Main Menu appears then, click [About].



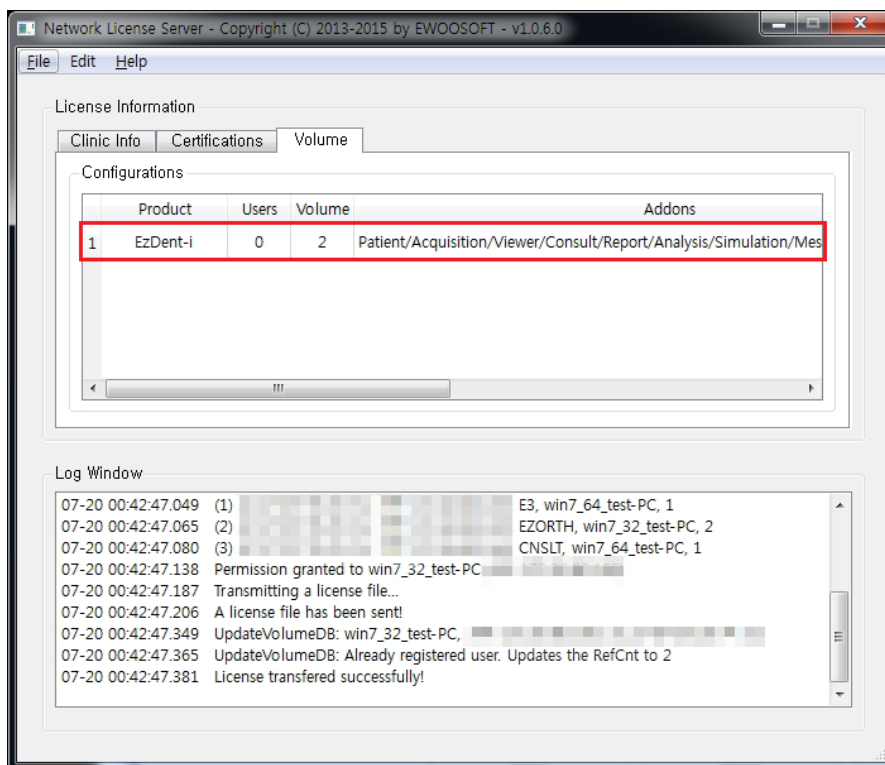
2. When the [ABOUT] window appears, click the [Deactivate] button at the bottom of the window.



3. A window will appear that confirms the deactivation. Click the [OK] button.



4. After the license is deactivated, the number of users will decrease under the [Volume] tab in the [VTNL] window.



To reactivate the license, refer to 'Installing Chapter1. EzDent-i → 6. License Activation'. If you need more copies of license, contact the customer service.

## 8. Consult Database License Activation

To use the animated contents under the Consult tab, you must activate your consult database with license. There are three methods to activate the license.

- Dongle Key User (Regular User)

I will activate my license with USB Dongle Key.  
(For regular users)

→ Select the dongle key option for successful authentication of the Consult database. The Internet connection is not required when using the USB dongle key.

- License Key User (Regular or Demo User)

I will activate my license with License Key.  
(For regular or demo users)

→ Select the license key option to authenticate the Consult database demos. It can be used only where an internet connection is available.

- Trial Version User (Trial User)

I will try this software.  
(For Trial Users : days left until it expires(30))

→ If you do not have either one of these two keys, select the trial option to test the Consult database for 30 days. It can be used where an internet connection is not possible.

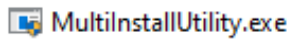


- If you have a license, you are able to use all contents. But if you do not register the license, only the contents that the user adds to the DB are available.
- Trial version users are able to use all contents for 30 days. After 30 days, only the contents that the user adds to the DB are available.

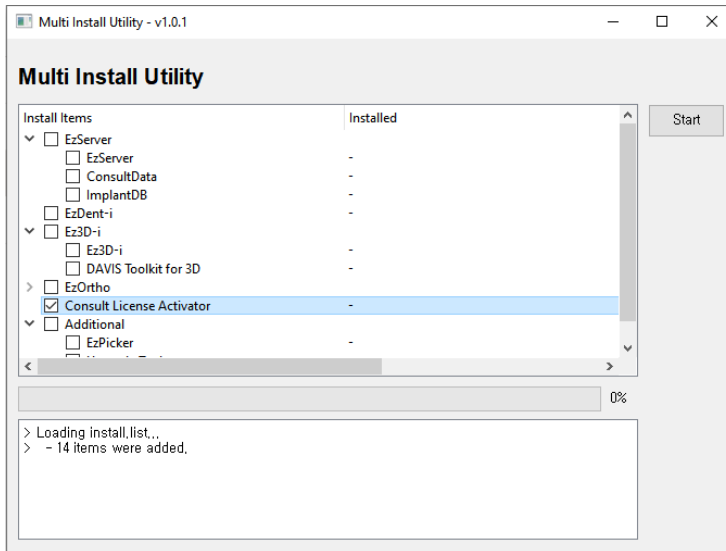
Refer to the following sections to activate the three license options above.

## 8.1 For Regular Users: Activating License with a USB Dongle Key

1. Open MultiInstallUtility.exe while VTNL is running.



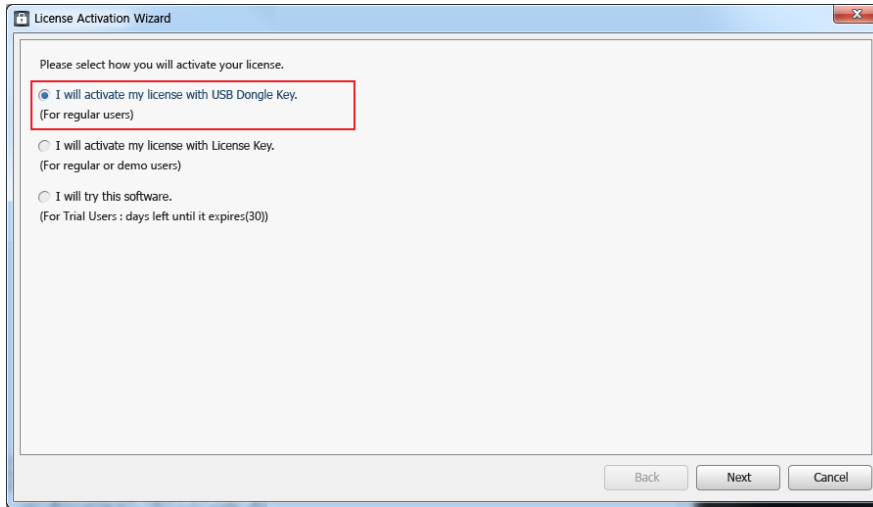
2. Select Consult License Activator and click [Start] button.



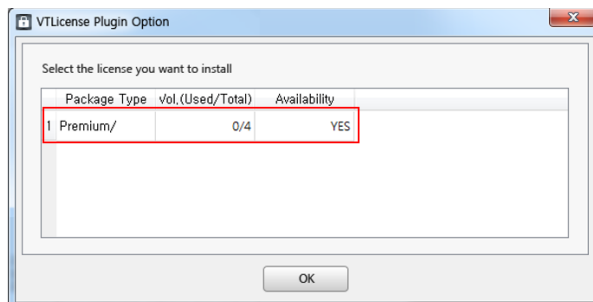
3. The [Consult Data License Activator] window will appear, including the license information. Check the information and click the [Activate] button.



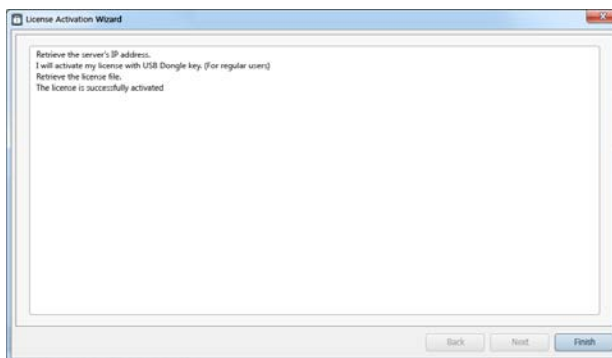
- Select the dongle key (first) item, and then click the [Next] button.



- When the following the [VTLICENSE PLUGIN OPTION] window appears, select the license key from the list and install by clicking the [OK] button.



- After clicking the [OK] button, the following the [LICENSE ACTIVATION WIZARD] window appears. Once the license has been activated, click on the [Finish] button to complete your activation. EzDent-I will then run automatically.



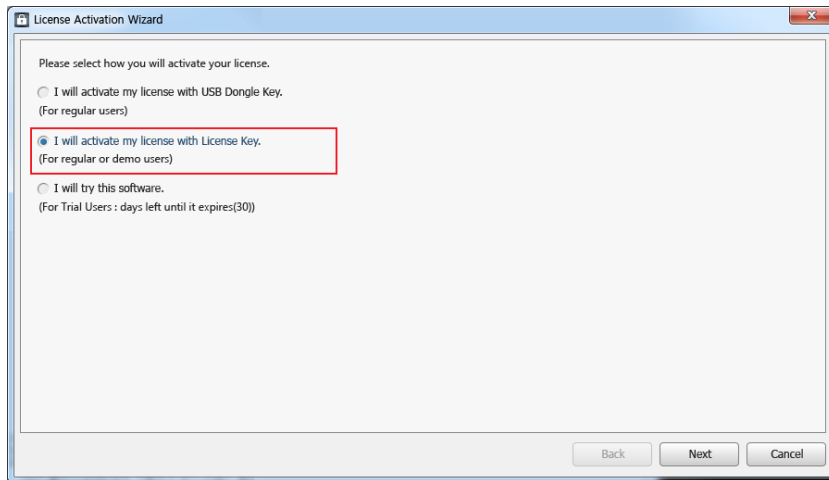
## 8.2 For Regular or Demo Users, Activating License with a License Key



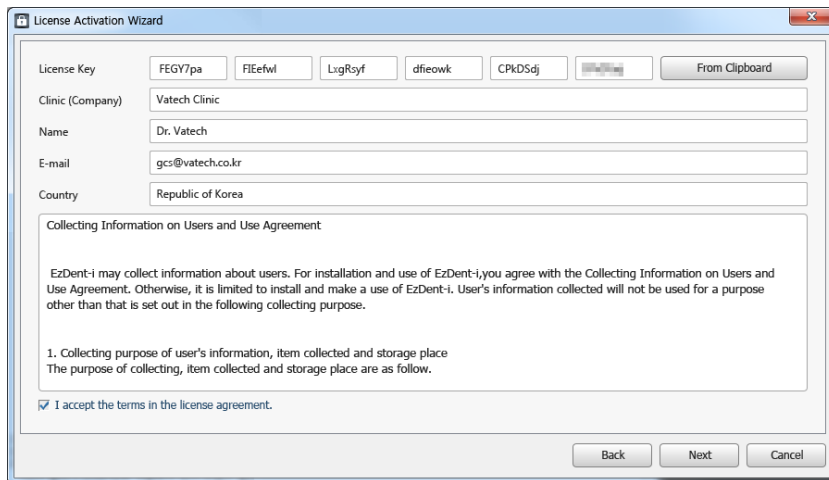
NOTE

For activating license using the license key, an internet connection must be available with the PC.

1. Select the second option from the [LICENSE ACTIVATION WIZARD] window.



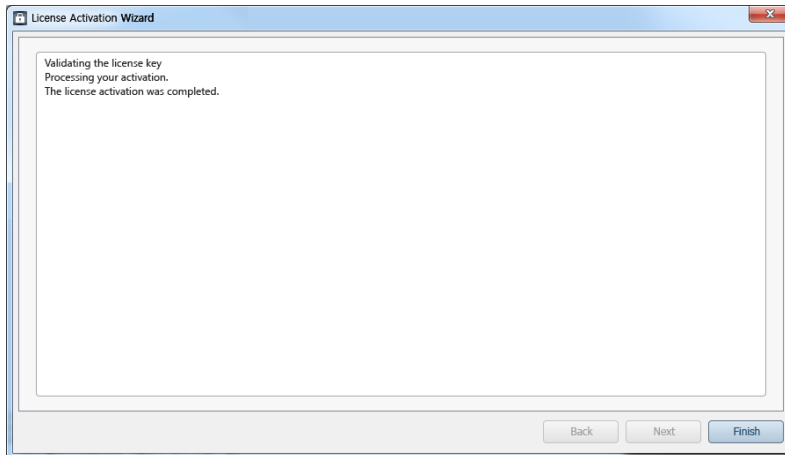
2. Enter the EzDent-i user information and license key provided. And then click the [Next] button. You must enter more than 3 characters to activate the [Next] button.



Copy the license key with <Ctrl+C> keys, and click the [From Clipboard] button for easier input.

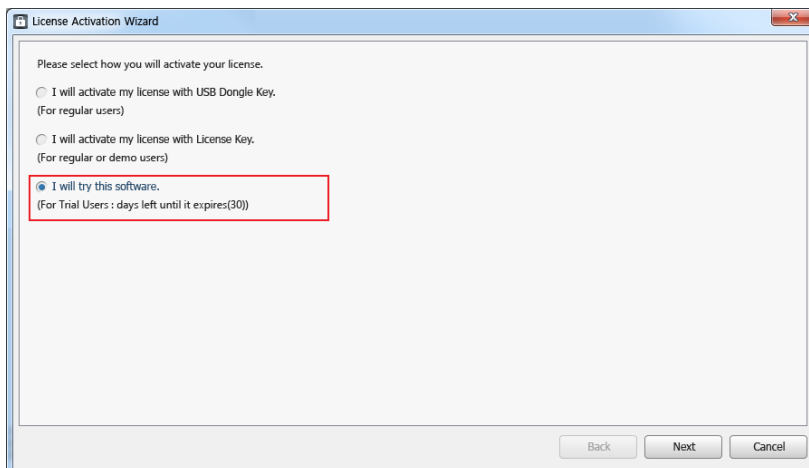


3. Upon the successful activation, the [LICENSE ACTIVATION WIZARD] window will appear, including the remaining days. Click the [Finish] button to end the activation.



### 8.3 30 Day Trial Users

1. Select the third option in the [LICENSE ACTIVATION WIZARD] window and click the [Next] button.



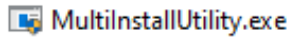
2. You can use the Consult database for 30days.



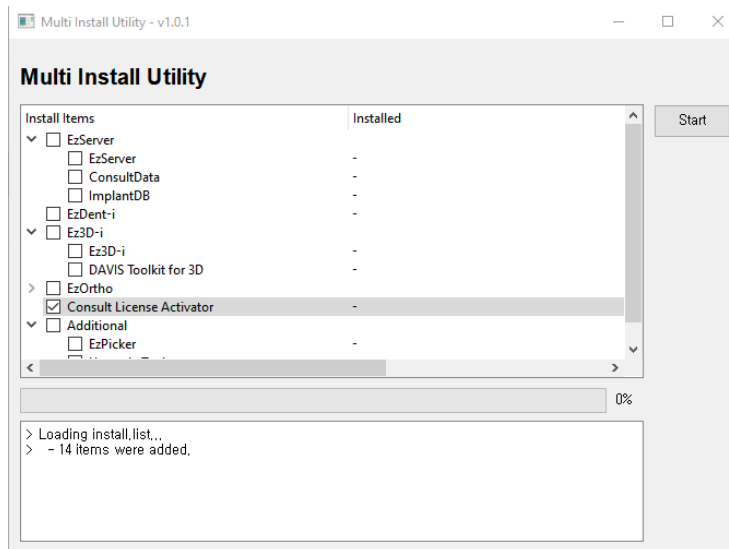
- When 30 days have passed, the user needs to activate the dongle key license or demo license again. If user doesn't have a license, please contact a customer support center of Vatech.
- For the users who use Consult Premium Trial license, the expiration of license will be notified to users in a pop-up window from the seven days before the expiration.

## 9. License Deactivation of Consult Database

1. Open MultiInstallUtility.exe.



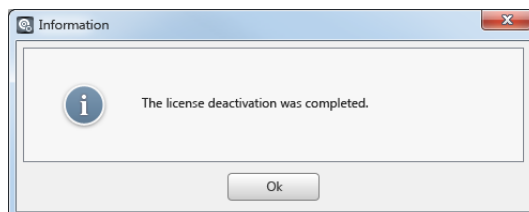
2. Select Consult Licence Activator and click [Start] button.



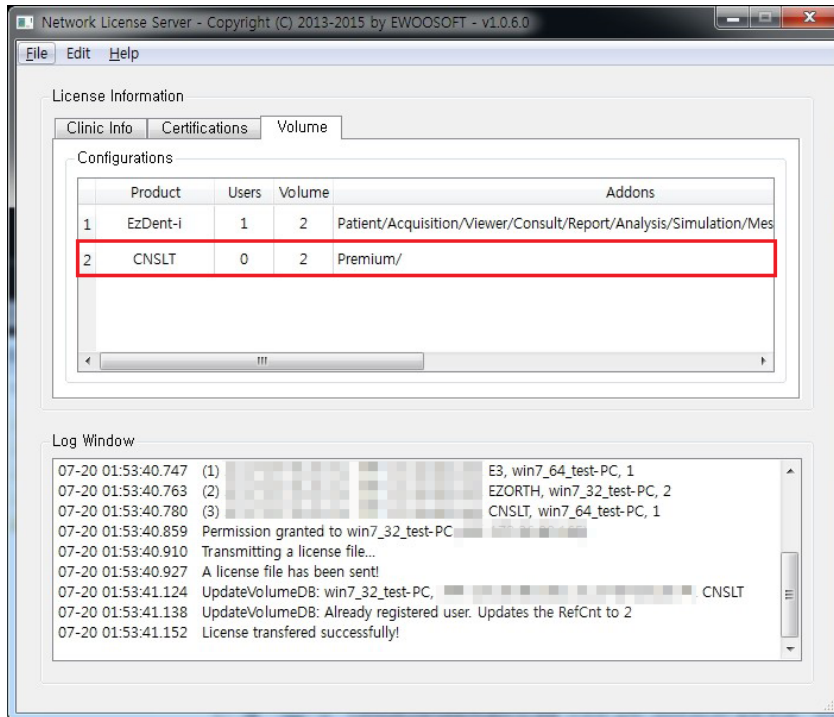
3. The [Consult Data License Activator] will appear, including the license information. Check the information and click the [deactivate] button.



4. A window will appear that confirms the deactivation. Click the [OK] button.



5. After the license is deactivated, the number of users will decrease under the [Volume] tab in the [Network License Server] window.





## Chapter 2. Setting Up EzDent-i

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# 1. Quick Settings

The following Quick Setting Window appears when you run EzDent-i for the first time after installation. You can set Sever IP Address, Settings Location, Language, Teeth Code and DB Save Option. More details can be set in the Settings of Main Menu.

QUICK SETTINGS

Quick Settings  
Please select from the options below to proceed

Server IP Address  Port

Settings Location  
 Local  Server

Language

Teeth Code  
 Universal System  FDI System

Privacy Policy Setting  
 Enable  Disable

Save Option

IO Sensor  
 Manual  Auto DB Save

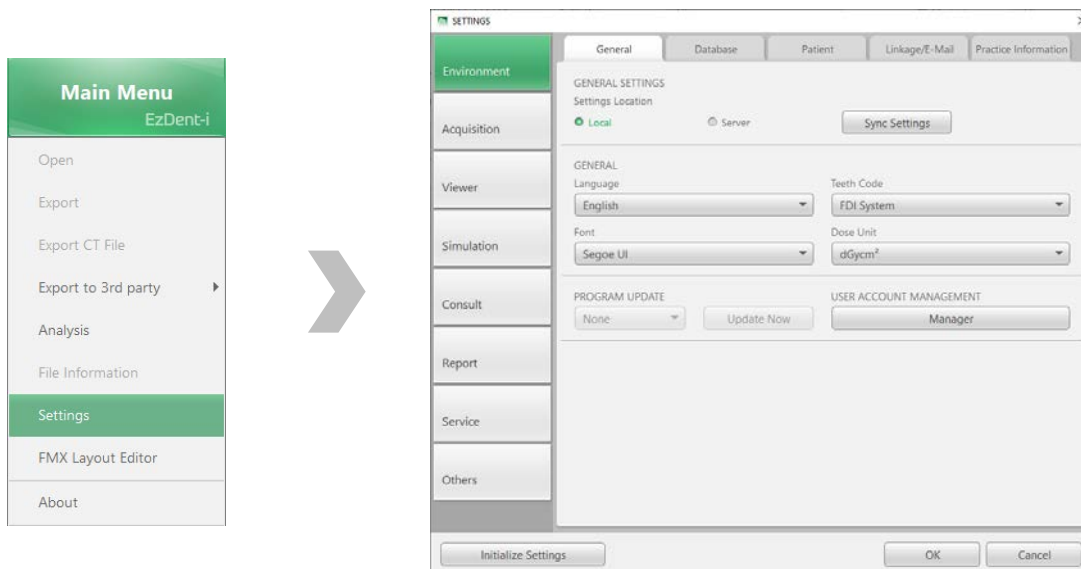
IO Camera  
 Manual  Auto DB Save

Twain  
 Manual  Auto DB Save

- The default port number is automatically displayed.
  - Initially installing EzDent-i v3.1 or later: 43112
  - Updating previous version: 55005
- This window appears every time you run EzDent-i until the required information is filled.

## 2. Getting Access to Settings

In Settings, users can edit different features of EzDent-i. Click the main menu and select [Setting] from the list. The Settings window will appear. This chapter explains about each setting in detail.

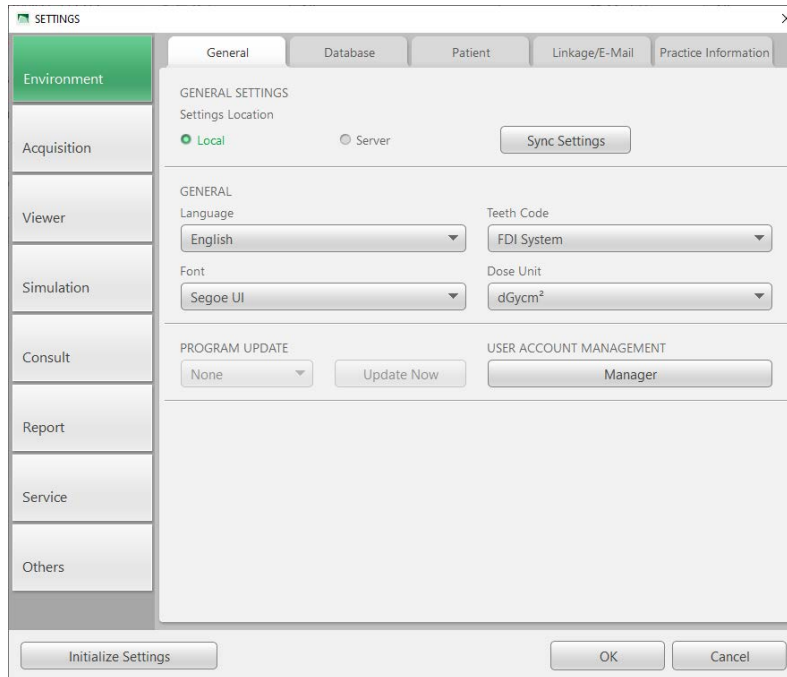




## 3. Environment

### 3.1 General

Settings for Configuration, Linking with other programs, and Networking are available.



#### 1. Settings Location

Decide whether to set up the EzDent-i on the network server or locally. To be the same as the server, EzDent-i should reflect any changes in the server database in real time.

On the other hand, if the setup is done locally and not linked to the server, it cannot receive data from the server machine. Therefore, the database must be synchronized with the server on a regular basis by clicking the [Sync Settings] button.

#### 2. GENERAL

User can change the setting for the language, teeth code, date format, dose unit, and font.

##### ▪ Language

Select the language of EzDent-i. EzDent-i supports 16 different languages including Korean and English. After setting the language, restart EzDent-i.



- Some fonts may not be available for certain languages.
- The date format is automatically set depending on the selected language.

##### ▪ Font

Select the font type used in EzDent-i. Tahoma is recommended in EzDent-i.

- **Tooth Code**

Select a tooth numbering system. The types of each tooth numbering system are below.

- **Tooth Numbering of FDI(Federation Dentaire Internationale) System**



- **Tooth Numbering of Universal System**



- **Dose Unit**

Select a dose unit of notation. (Dose unit: mGym<sup>2</sup>, Gy<sup>2</sup>, dGy<sup>2</sup>, uGy<sup>2</sup>, mGy<sup>2</sup>)

### 3. PROGRAM UPDATE

- User can select the option whether EzDent-i will be updated automatically or manually.
- In case of [Auto], EzDent-i is updated automatically to the latest version of EzDent-i by VTPatchManager.
- In case of [Manual], EzDent-i is updated when user click the [Update Now] button. If User doesn't want to update EzDent-i, set this to [None].

### 4. USER ACCOUNT MANAGER

Log in with the admin account to add, modify, or delete the user accounts. The user accounts are managed under the [Settings > Environment > General > USER ACCOUNT MANAGER] option.

- **Restrictions on Authority by Account Types**

Depending on the type of user accounts, restrictions on authority apply as below.

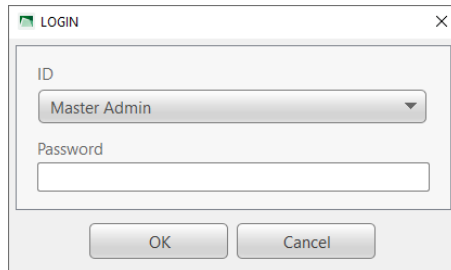
Account	Restrictions on Authority
Master Admin	None
Admin	None
Doctor	User Account Manager, Delete Data, Edit Consult Contents
Staff	User Account Manager, Delete Data, Transfer Data, Edit Consult Contents

- When registering a patient, you can assign an ID with the doctor account to the patient as the doctor in charge.
- If a doctor ID has been changed, the doctor ID saved in the patient information also changes.
- If a doctor ID is deleted, the doctor ID saved in the patient information is also deleted.

- When you assign 2 doctor IDs to the patient information and deleted one of them, the other ID remains on the patient information.

- Login/ Logout Option

When using the login option, you must enter the password to run the EzDent-i program.



The logout option is only activated when you are using the login option. After the set logout time has passed, the program is automatically logged out.

- Password Setting

EzDent-i requires password to delete the contents or the registered patients. The initial password is numbers 0000. Password must be at least 10 characters in length and contain at least one upper case, lower case, numeric character, and special character (excluding whitespace). Users can change the password policy in EzServer settings. Users can set the password expiration in EzServer settings. The default value of expiration date is set to 180 days.



Users may change the EzServer settings as below.

- Enter <http://localhost:43112/settings> into the address bar of the Internet to set the file server and DB server. (<http://localhost:55005/settings> for EzServer less than v4.0)
- Go to Other Setting in the Server Control Panel and click [Open in Browser] button to access to the sever setting window.

Entering incorrect password for 10 times will deactivate the account. To reactivate the account, reset the password using Master Admin or contact Customer Support Center.

## 3.2 Database

The screenshot shows the 'SETTINGS' window with the 'Database' tab selected. The 'Server' section contains an 'Address' field with '127.0.0.1' and a 'Port' field with '43112', along with a 'Search Server' button. The 'EZPICKER' section has an 'EzPicker IP Address' field with '127.0.0.1' and two radio buttons: 'Use' (which is selected) and 'None'. The left sidebar is active on 'Environment'. At the bottom, there are 'Initialize Settings', 'OK', and 'Cancel' buttons.

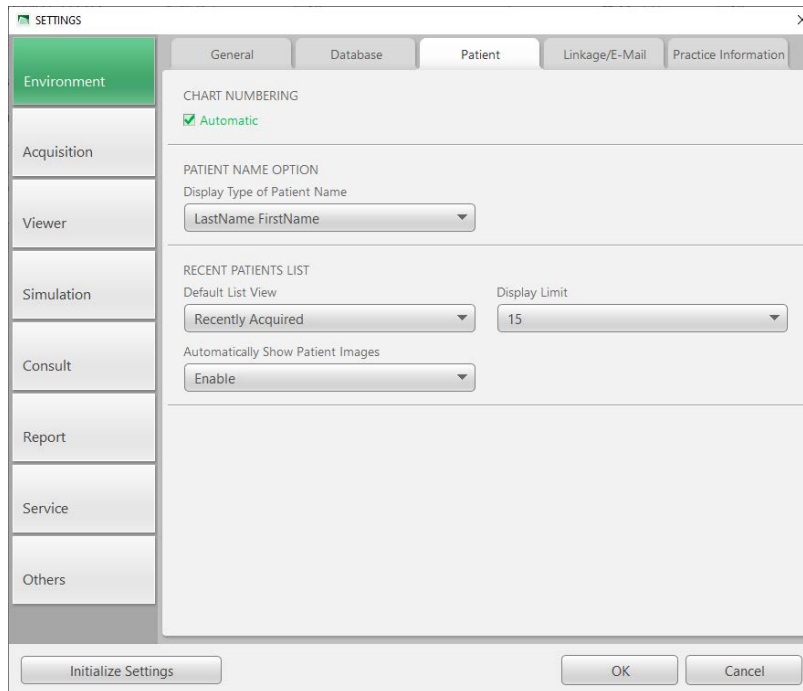
### 1. Server

Enter the EzServer address. To search the address, click on the [Search Server] button.

### 2. EZPICKER

EzPicker is a program that can link a third party PMS with EzDent-i. In the EzPicker box, enter the IP address of the PC that Ezserver is installed. For more details, please refer to the Service Manual.

## 3.3 Patient



### 1. CHART NUMBERING

Determine whether a chart number is to be generated automatically or entered manually during patient registration. Check the box for a number to be generated and entered automatically.

### 2. PATINET NAME OPTION

Specify the patient name format.

### 3. RECENT PATIENTS LIST

- [Default List View]: Set how to list the patient in the Patient List when launching the program. You can set to list patient by the acquisition date or viewed date.
- [Automatically Show Patient Images]: When enabling the [Automatically Show Patient Images] option, the images of a selected patient are displayed on the right pane automatically after launching the program. When disabling the [Automatically Show Patient Image] option, the images of a selected patient are not displayed automatically, and users should double click the patient to display the images.

## 3.4 Linkage/E-mail

Set up the 3D Viewer integration and Email setting.

### 1. LINKAGE

- When double clicking a 3D image, the patient image appears in 3D through a 3D viewer that is already linked. The user can select a 3D viewer to display a 3D image.
- EzDent-i is linked with Ez3D-i, VATECH's 3D Imaging Viewer. In case that Ez3D-i is installed, Ez3D-i is opened when a user selects a CT image in VIEWER Tab. If another 3D Imaging Viewer is linked, set the location of its exe. file.
- If the user needs to use multiple 3D Viewers, specify the path at Second/Third 3D viewer area in the subsequent fields.
- Click and select the check box of [Use] for the [Grouping of 3D Orthodontic Data] option to group the 3D orthodontic data.
- Analysis Program (Ceph Analysis Software)  
EzDent-i can be linked with a 2D Cephalometric Program. The three programs which can be linked with EzDent-i are EzOrtho, OrthoVision or V-Ceph. Set the location of program of 2D Cephalometric Program in this field.
- If the [Data Group] option is set to [Use], you can group and use the 3D orthodontic data. (There should be saved CT images for data grouping.)

### 2. E-MAIL SENDER INFORMATION

When sending a patient image or a report through email, enter the information of the sender. Enter the E-mail address and the password for that account, then enter the name of the sender in the Name field. Test the email link by clicking the [Test] button.

- The following information will be automatically filled when the user is using the domain that is predefined by EzDent-i (Gmail, Yahoo, Daum, Hanmail, Naver, Hotmail, AOL, Nate, Outlook)
  - SMTP Server Address, Port, Security

- After inputting email information, click the [Test] button to check if it operates normally.

## 3.5 Practice Information

### 1. PRACTICE INFORMATION

Enter the clinic information. On the REPORT tab, the clinic information is displayed in the header or footer.

### 2. PRACTICE LOGO

Once you input the text and upload the clinic logo image, it appears in the bottom left of the EzDent-i screen. For the text, it appear as the name of the clinic, and for the logo image, the uploaded image will be automatically adjusted to the ratio of 200x45. The registered logo will be used in the reports as an advertisement.



NOTE

You can use PNG, JPG, BMP, TIFF format for the loge image. Regardless of the uploaded image size, it will be automatically adjusted to the ratio of 200x45.

## 4. Acquisition

### 4.1 General

The screenshot shows the 'SETTINGS' window with the 'Acquisition' tab selected. The 'General' sub-tab is active. The 'SAVE OPTION' section has 'IO Sensor' and 'IO Camera' both set to 'Manual'. The 'TWIN' section is set to 'Manual'. The 'IO SENSOR OPTIONS' section has 'IO Sensor Image Resolution' set to 'Normal Resolution'. The 'IO CAMERA CAPTURE KEY' section has 'Space' checked. The 'CALIBRATION' section has 'Panorama', 'Cephalo', and 'IO Sensor' all unchecked, with their respective value fields set to '0.005'.

#### 1. SAVE OPTION

Determine whether images captured with IO sensor or IO camera will be saved in the database automatically or manually.

For the manual setting, click the [Capture] button to acquire images. Select the images desired among the acquired images and click the [Save to DB] button and store the images in the database.

For the Auto DB Save setting, click the [Capture] button to save all acquired images in the database. For this reason, the Acquisition tab appears differently during image acquisition.

#### 2. IO SENSOR OPTIONS

When the image resolution is set to [High Resolution], the image acquired with equipment that supports high resolution will be saved in high resolution mode, but this [High Resolution] option will not affect the resolution of the images that are acquired with other general equipment.

#### 3. IO CAMERA CAPTURE KEY

Set the Keyboard key which can be used as the capture key for your IO Camera.

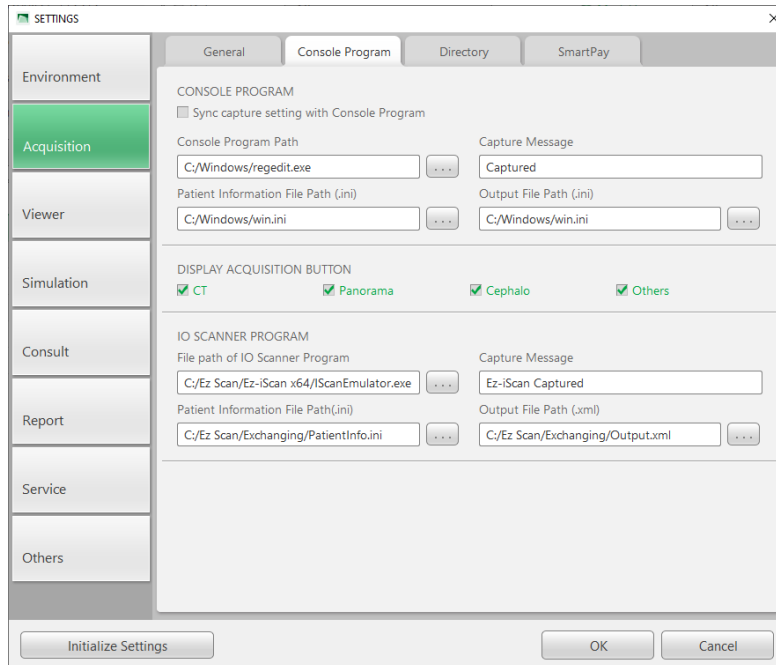
#### 4. CALIBRATION (Image Length Adjustment)

The set calibrated values can be automatically applied to the Panorama, Cephalo or IO Sensor images that are not calibrated. To apply the calibrated value, click the check boxes to show the checkmark.



## 4.2 Console Program

Input the path of the Console S/W that you're using for image acquisition. To synchronize the image acquisition program with EzDent-i, information should be entered as shown below.



### 1. CONSOLE PROGRAM

- Sync Capture Settings with Console Program

If this option is checked, it reflects console program's settings including the Console Program Path, Capture Message, Patient Information File Path and Output File Path automatically.

The auto sync function is not supported when no or non-compatible version of console program is installed. In that case, the user needs to enter the following items manually.

- Console Program Path

Enter the location of executable file. When the image acquisition program is set as default, the location should be 'C:/VCaptureSW/exe/VCaptureSW.exe'

- Capture Message

When an image is acquired it sends a message. In case of the image acquisition program, input 'Captured' in the [Capture Message] field.

- Patient Information File Path

In case of the image acquisition program, 'C:/VCaptureSW/exe/PatientInfo.ini' path should be entered

- Output File Path

In case of the image acquisition program, 'C:/VCaptureSW/Output.ini' should be entered.

### 2. DISPLAY ACQUISITION BUTTON

Disable or enable the acquisition buttons including CT, Panorama, Cephalo and Others on the Acquisition Tab.

### 3. IO SCANNER PROGRAM

Enter the location of executable file. When the IO scanner program is set as default, the location should be 'C:/I-Scan A/Ez-iScan x64/Ez-iScan.exe'.

- Capture Message

When an image is acquired it sends a message. In case of the IO scanner program, input 'Ez-iScan Captured ' in the [Capture Message] field.

- Patient Information File Path

In case of the IO scanner program, 'C:/I-Scan A/Exchanging/PatientInfo.ini' path should be entered

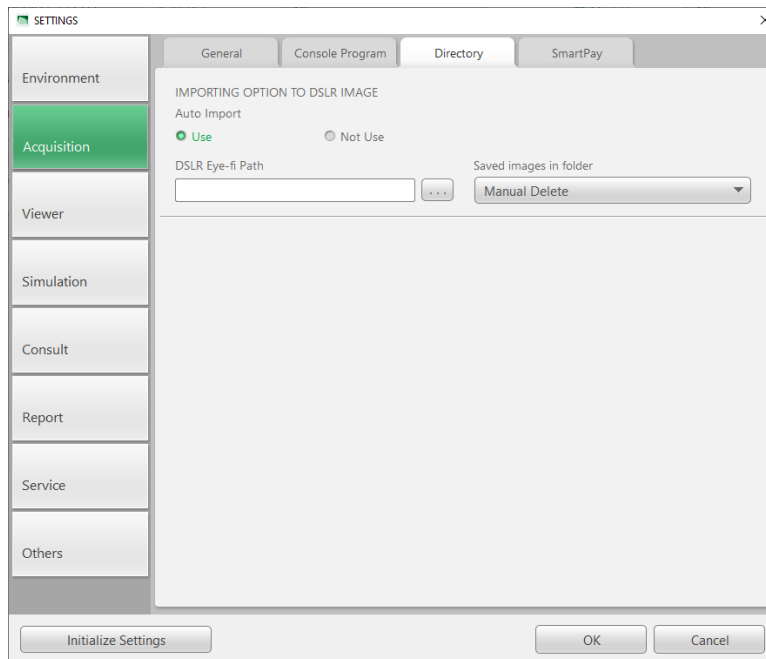
- Output File Path

In case of the IO scanner program, 'C:/I-Scan A/Exchanging/Output.xml' should be entered.



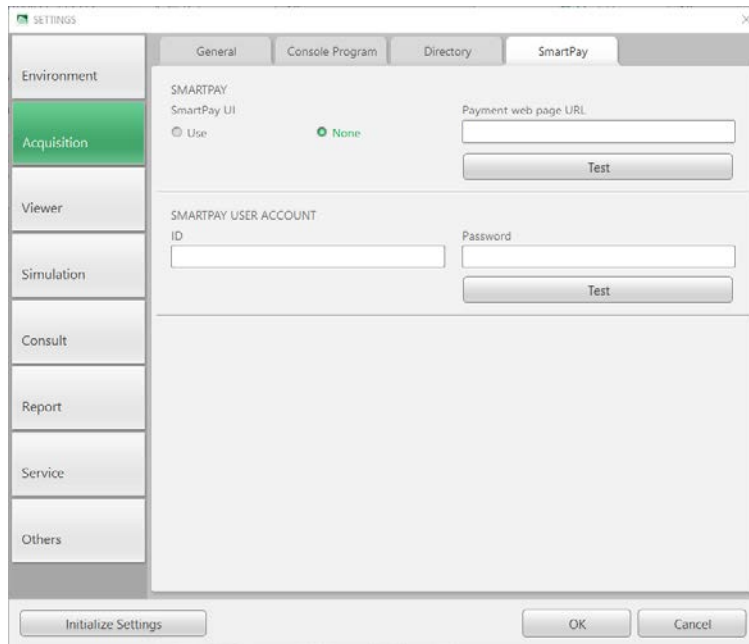
The recent changes on file path or filename of the console program may not be reflected in this manual.

## 4.3 Directory



When using DSLR, you can change the setting to import the images from the specifically set folder. Change the [Auto Import] option to [Use], and specify [DSLR Eye-fi Path].

## 4.4 SmartPay



### 1. SmartPay UI

When the [SmartPay UI] option is set to [Use], the acquisition button in the Acquisition tab changes for SmartPay, and the [Sync Payment System] is added to the Main menu.

Input 'https://smartpay.vatech.biz/' in the [Payment web page URL] field.

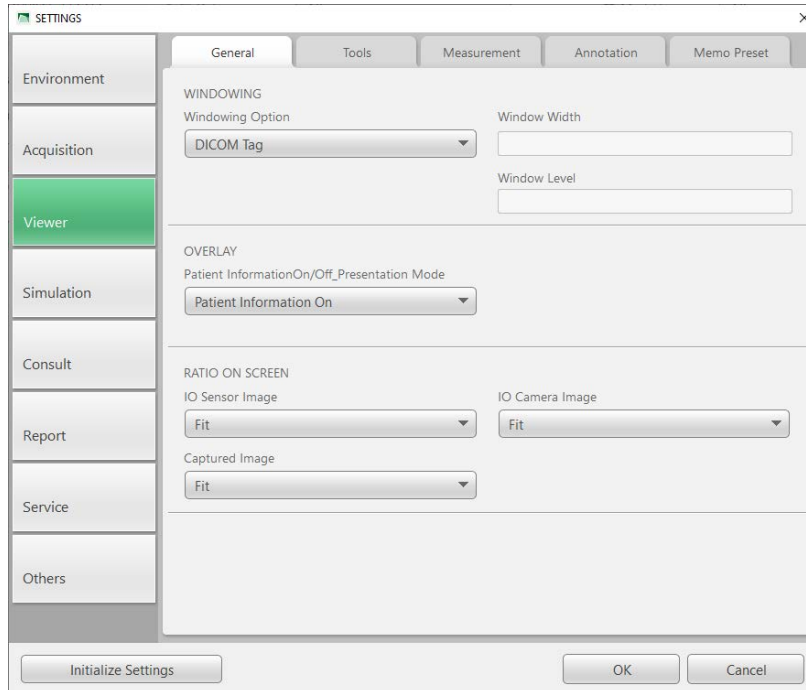
### 2. SmartPay User Account

Enter the User Account information to use the SmartPay function. The user should create a user ID and password on the Vatech Korea web page ([www.vatechkorea.com](http://www.vatechkorea.com)).

SmartPay is only available for the users in Korea.

## 5. Viewer

### 5.1 General



#### 1. WINDOWING

When applying the windowing effect of the DICOM file to an image, select the [DICOM Tag] option to generate the values automatically, or select the [User Define] option to manually enter the windowing values. EzDent-i recommends applying the windowing effect with the value read from the DICOM Tag file.

#### 2. OVERLAY

Set the default setting of the [Patient Information Show/Hide] function on the Presentation mode.

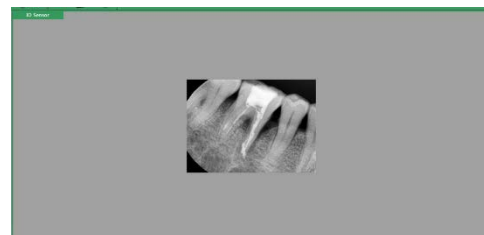
#### 3. RATIO ON SCREEN

Select the size of the IO sensor image, IO Camera Image, and Captured Image which appears in the image view.

For example, when [Fit] is selected from the list, the image is fitted to the window size in the image view. When the Ratio on Screen\_IO sensor image is set to [40%], screen appears as shown below.

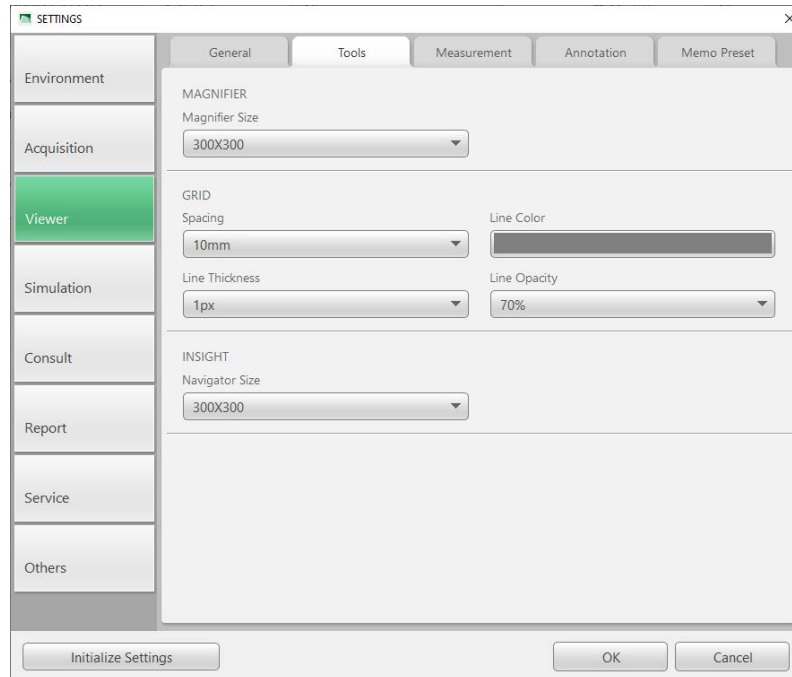


Set as Fit



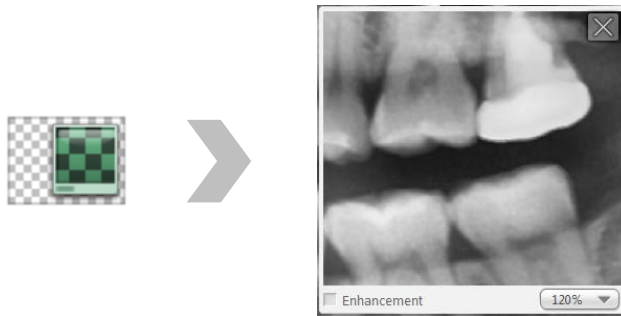
Set as 40%

## 5.2 Tools



### 1. TOOL → Magnify & Enhance View Size

Adjust the size of the [Magnify Enhance] tool in the VIEWER tab. Adjust the size of the magnifying glass to enlarge a part of the image.



### 2. GRID

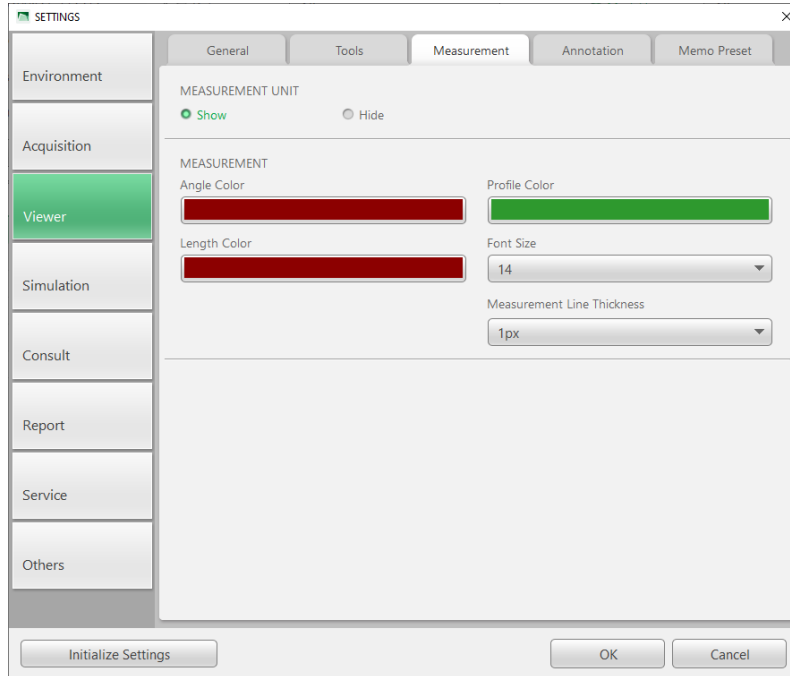
Set the default values of grid that is used to check the asymmetry of patients on the VIEWER or CONSULT Tab. You can set the spacing, line color, line thickness or the line opacity of grid.

### 3. Insight

Set the default size of navigator that is used when viewing multi-framed images on the Viewer Tab.

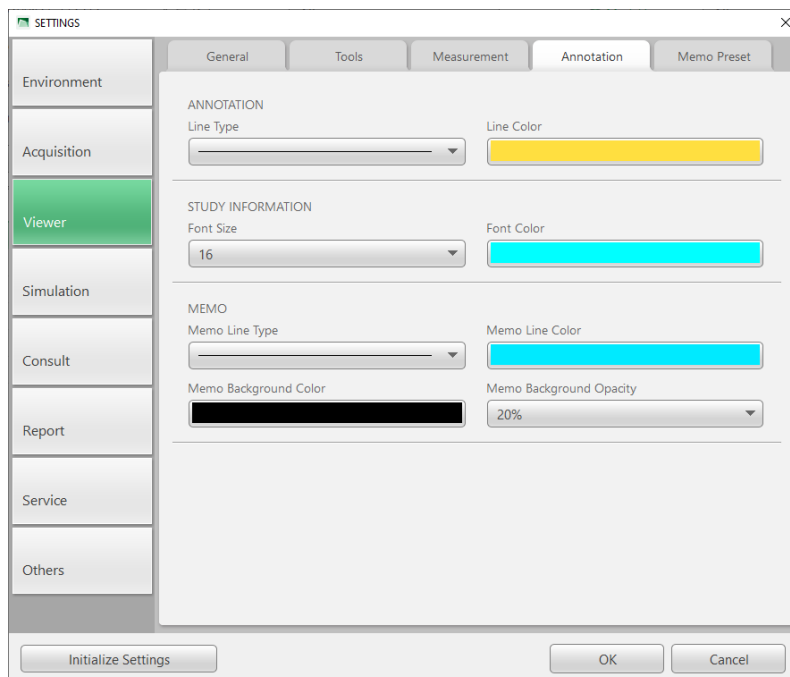
## 5.3 Measurement

Set the properties of the [Measurement] tools shown in the VIEWER tab. Set the color and the thickness of the line drawn from the tools.



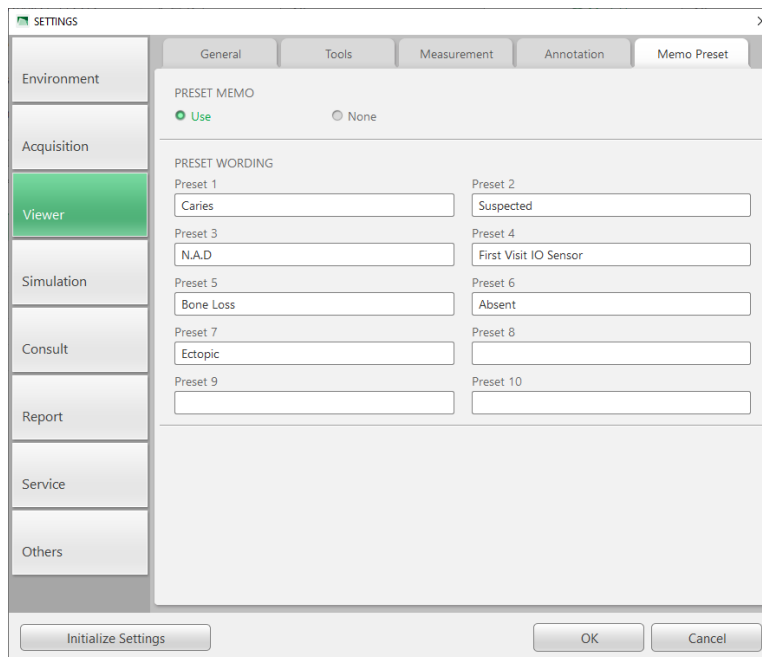
## 5.4 Annotation

Set the properties of the [Annotation] tools shown in the VIEWER tab. Set the color of the line and the font size, etc.

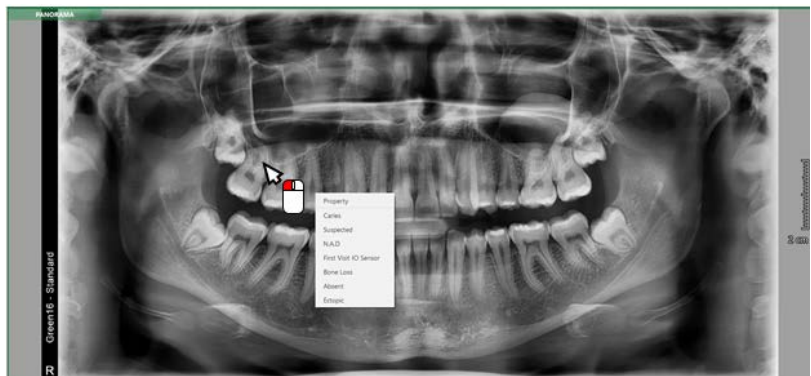


## 5.5 Memo Preset

Save frequently used phrases when using the memo tool from the VIEWER tab.

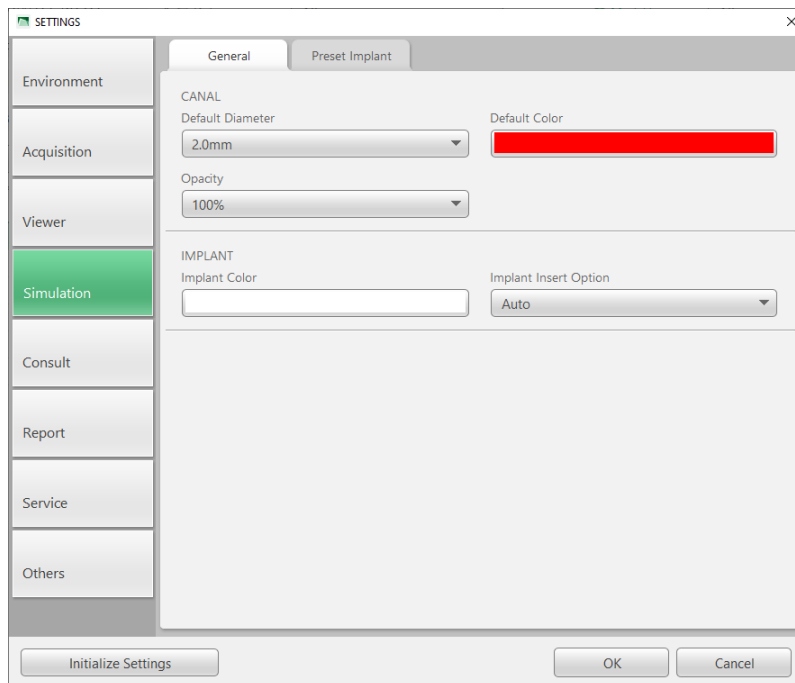


1. Input a random phrase (e.g. Tooth Extraction Case) to [Memo Preset > PRESET WORDING] and click the [OK] button at the bottom of the [Settings] window.
2. Move to the VIEWER tab and click the [Annotation > Memo] icon on the tool bar.
3. Click on the image where the user wishes to leave memo. The saved phrases in [Preset Memo] appear in a list and click the desired phrase to insert on the image.



## 6. Simulation

### 6.1 General



#### 1. CANAL

Set the properties of the [Draw Canal] feature under the VIEWER tab.

#### 2. IMPLANT

Set the properties and insertion methods of the [Implant] feature under the VIEWER tab. In case of [Auto], user can insert the implant automatically at the specific location according to the user specified number. In case of [Manual] user can locate and insert the implant manually.



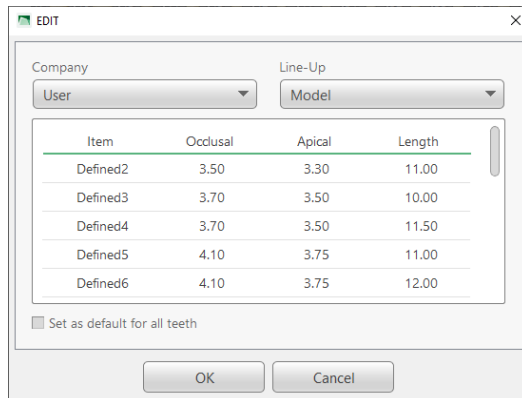
## 6.2 Preset Implant

To insert the implant, click [Insert Implant] under the VIEWER tab. The basic information for each implanted tooth is already set. In this setting, you can change the implant information. Perform the following steps to change.

1. Select the tooth considered for placing an implant and click the [Modify] button. The [EDIT] window appears.



2. Select the implant company and line up of the implant to edit.



3. The information and image appear based on the selected implant properties. Click the [OK] button to change the default type of implant.


Click the checkbox of the [Set as default for all teeth] option to make the modified implant as the default implant for all teeth.

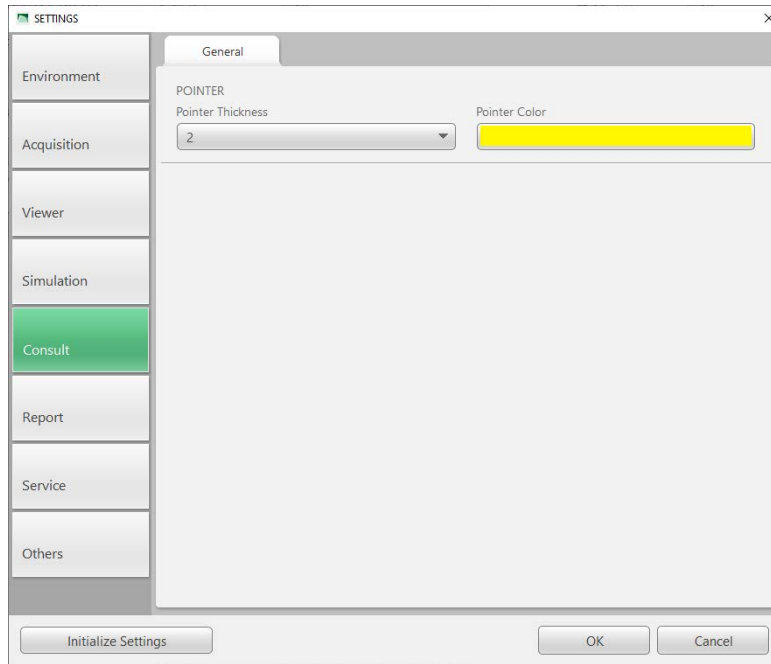


If the EDIT window does not appear, install ImplantDB. ImplantDB installation is described at 'Chapter1. Installing EzDent-i'.

## 7. Consult

### 7.1 General

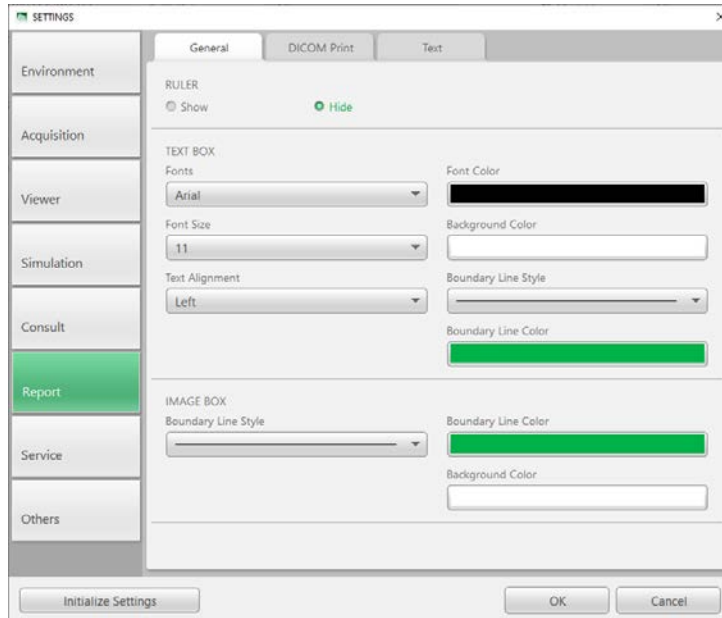
Change the properties of the [Pointer] tool (  ) on the Consult tab. Set the line thickness and color of the [Pointer] tool on the Consult tab.



## 8. Report

### 8.1 General

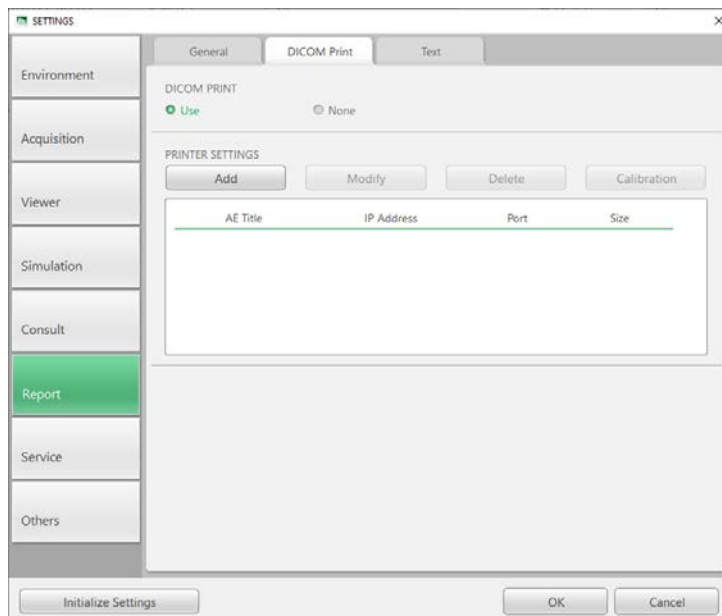
User can change the properties of the image box and the text box of Report tab, and show or hide ruler from the screen.



To change the properties of the box, right click on the Text or Image box and select [Property] in the menu list.

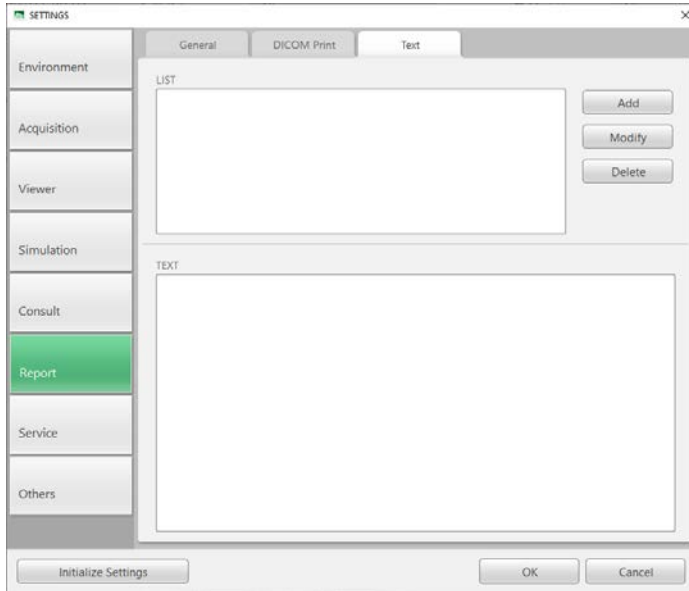
### 8.2 DICOM Print

Set Dicom Print to register, adjust, delete and settings.



### 8.3 Text

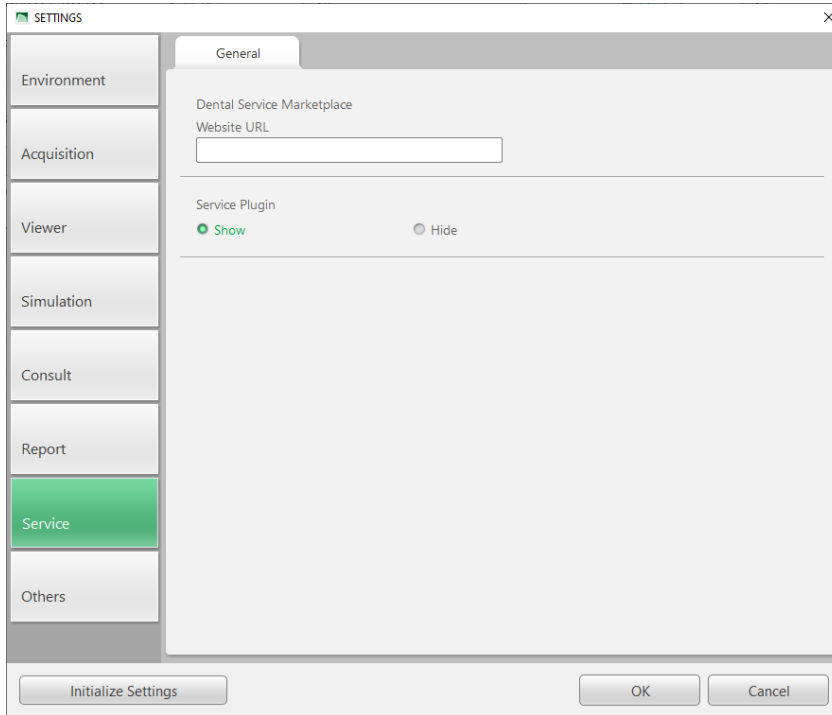
The frequently used words can be saved in Text. The saved words will be selected by right clicking. Refer to 'Chapter 8. The REPORT Tab' for more information.



## 9. Service

### 9.1 General

To use SERVICE tab, it should be connected to teleradiology service called vatech hub. Enter the URL of vatech hub. ([www.vatech-hub.com](http://www.vatech-hub.com))



The screenshot shows the 'SETTINGS' dialog box with the 'General' tab selected. The 'Service' tab is highlighted in the left sidebar. The main area contains the following fields and options:

- Dental Service Marketplace**
  - Website URL:
- Service Plugin**
  - Show
  - Hide

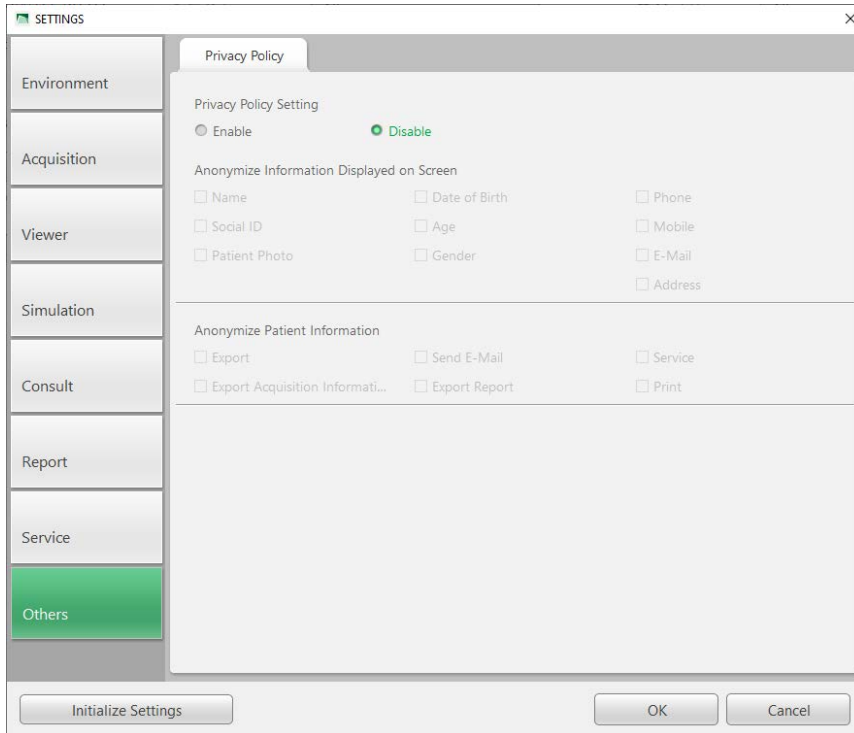
At the bottom of the dialog, there are three buttons: 'Initialize Settings', 'OK', and 'Cancel'.



In order to automatically download and save results from vatech hub to EzServer, the user's ID and password must be saved to TRAgent.

## 10. Others

### 10.1 Privacy Policy



#### 1. Privacy Policy Setting

Set whether privacy policy function is used or not. Only when this field is set to [Use], the fields below are activated.

#### 2. Anonymize Information Displayed on Screen

Select which patient information is to be anonymized on the screen.

Only the selected items will be displayed will be replaced with asterixes(“\*\*”)

Note: This does not affect the user’s input when searching for patients or adding/editing patient information.

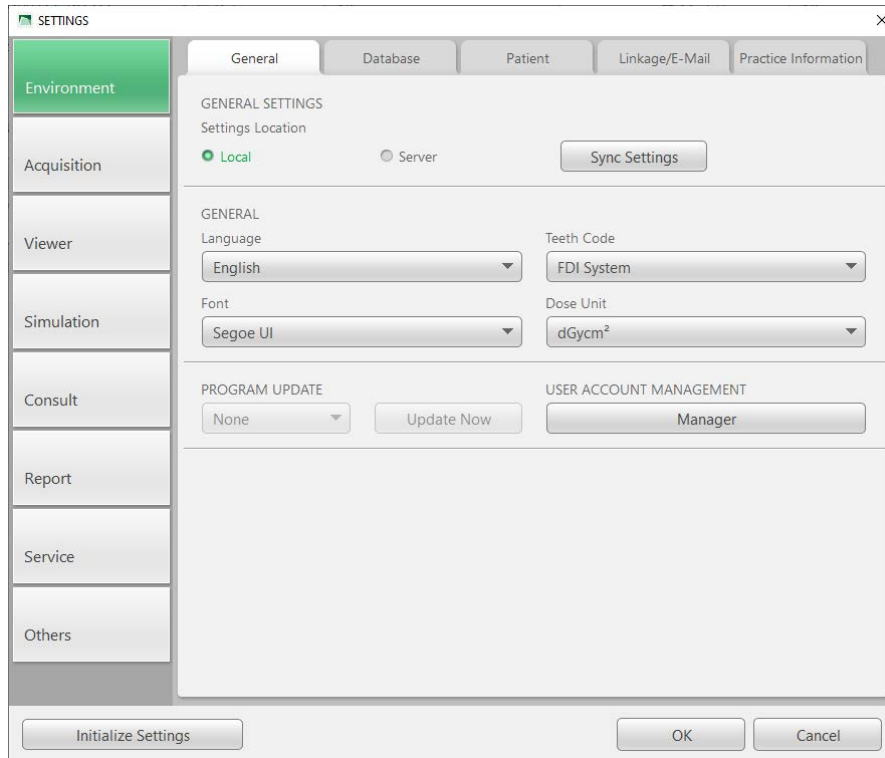
#### 3. Anonymize Patient Information

Users may choose to anonymize patient information when using any of the following functions. EzDent-i does not provide users with the ability to anonymize specific user information.

If the function is not selected, EzDent-i will not display the option to anonymize patient information in the user interface.

## 11. Initialize Settings

To set the Settings of EzDent-i back to the initial state, users can click the [Initialize Settings] button. Other than the items in the Database tab, all settings will be back to initial values. Thus, users should be careful before clicking the [Initialize Settings] button.







## Chapter 3. EzDent-i Basics

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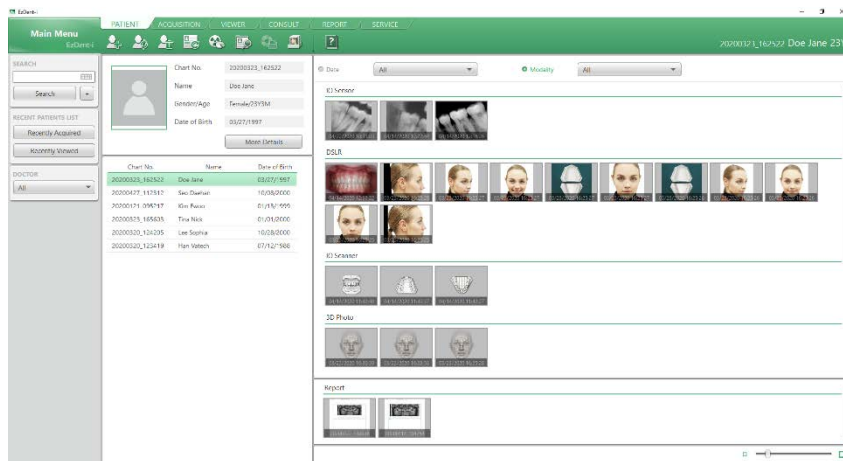


## 1. Starting EzDent-i

1. Double click the EzDent-i icon on the desktop. The launching window appears and EzDent-i is opened.





2. EzDent-i is opened and the first screen appears.



3. To run EzDent-i normally, EzServer must be running on the Server PC.

The operation of EzServer can be checked from the Tray icons in the lower-right corner of the desktop.

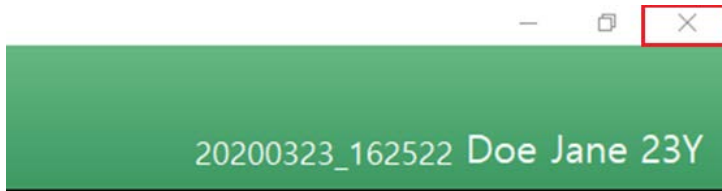
If any error message related with VTFFileManager appears, check if VTFFileManager is on.

-  EzWebServer Service is ON
-  EzWebServer Service is OFF

Right click on the tray icon to open Server Control Panel or to turn on/off EzWebServer Service.

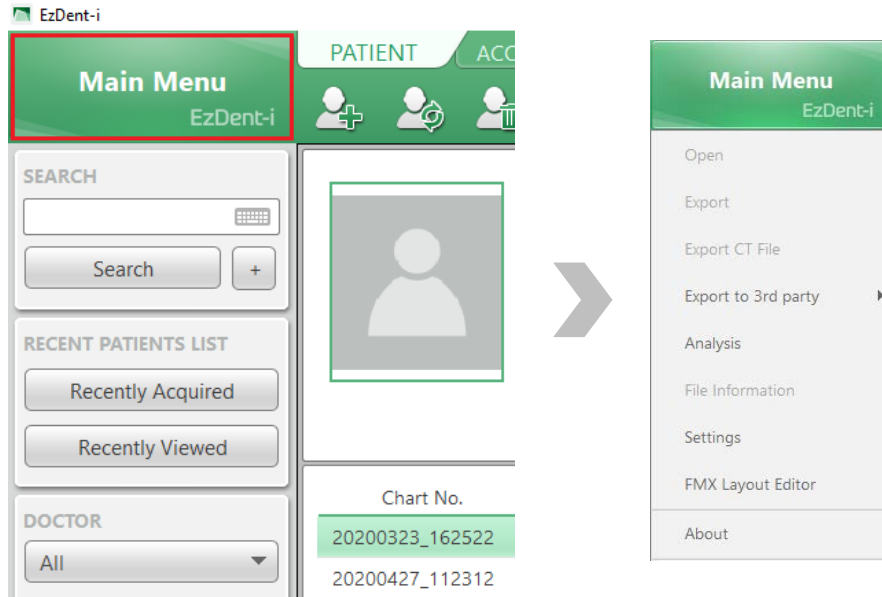
## 2. Exiting EzDent-i

To exit EzDent-i, click the Exit button in the upper right corner of the EzDent-i screen.



### 3. EzDent-i Main Menu

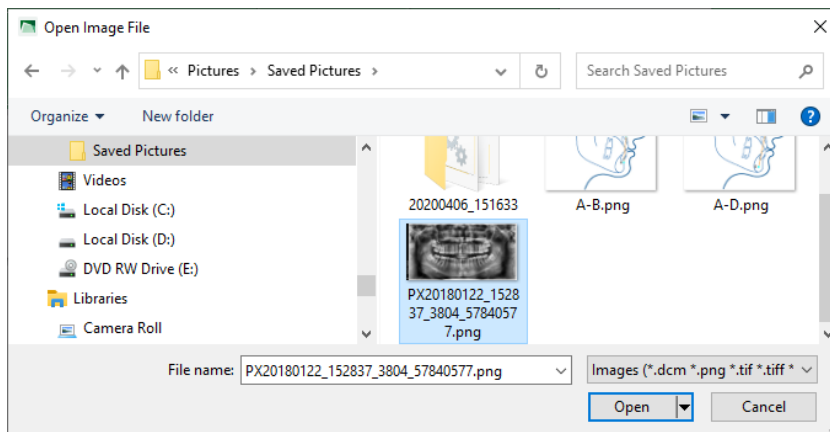
Through the main menu, users can easily manage saved images for Open, Export or applying image processing. Also, Settings that will be applied to EzDent-i can be controlled through the main menu. To verify the detailed features of the main button, click the main button, then, the list appears.



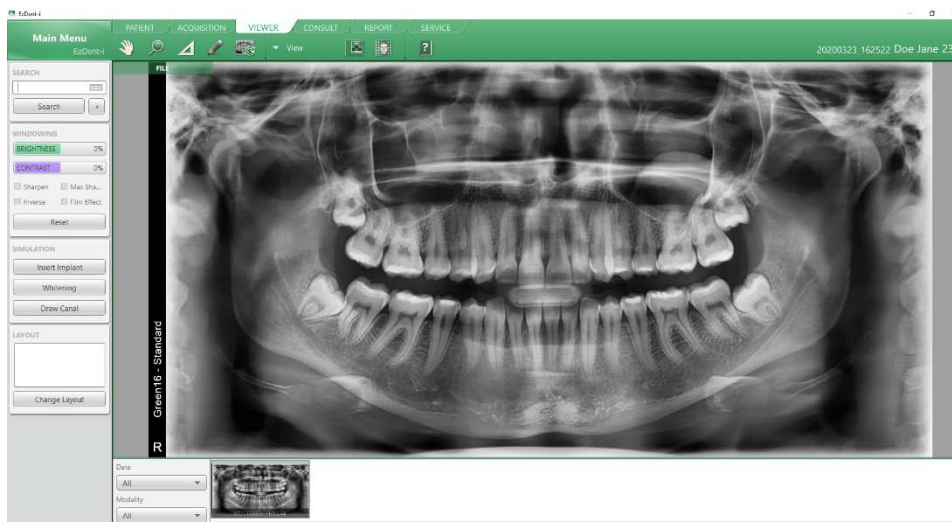
## 3.1 Open

Users can open images saved in the local PC by selecting Open from the main menu button.

1. On the VIEWER tab, click the main menu button and select [Open] to open an image on EzDent-i. When [Open Image File] window appears, select an image that will be opened in VIEWER tab.




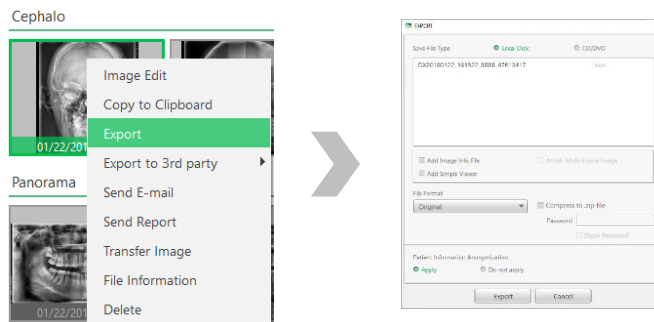
2. The open image is displayed in the Workspace.



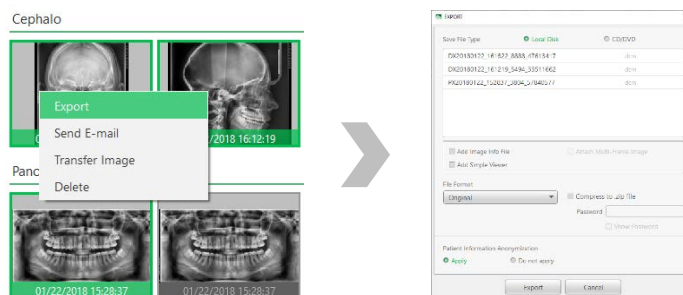
## 3.2 Export

Users can export images saved in EzDent-i to their local PC or CD/DVD.

1. Click the main menu button and then click the [Export] menu or click [Export] icon() from the toolbar to save images out of EzDent-i.
  - You can also export images to export from PATIENT tab by right-clicking on the image and selecting the [Export] option.

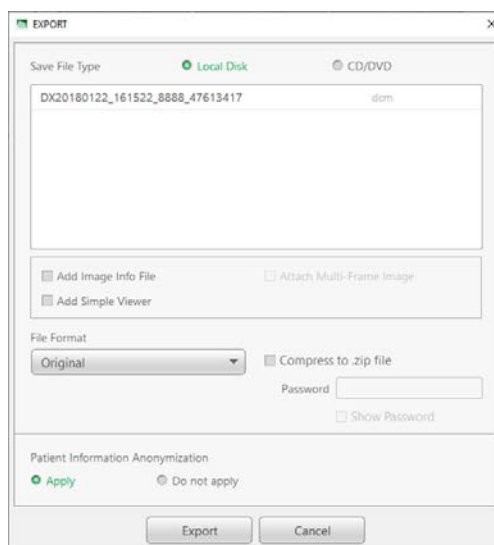


- It is possible to select multiple images by holding the Ctrl key on the keyboard and clicking the desired images and export them.



- If you export multiple images at the same time, all images will be saved into the same file format such as BMP, JPG, PNG and TIF as well as the original file format.

2. When the [EXPORT] window appears, click and select the file type.



- Save File Type
  - [Local Disk] option allows for the images to be exported to the local PC.
  - [CD/DVD] option is available to export the image onto a CD by burning the images.
- Other Options
  - [Add Simple Viewer] option is to export image with the patient information.
  - [Add Image Info File] option is to export image as well as export image information to text (.txt) files.
  - [Add Multi-Frame Image] option is to export data including multi-frame image.
- Checking [Compress to .zip file] allows you to [Export] all files (images, patient information) as a compressed file (.zip).
  - put a password during the [Export] process to password-protect the exported file.
  - Password can be entered up to 12 digits.



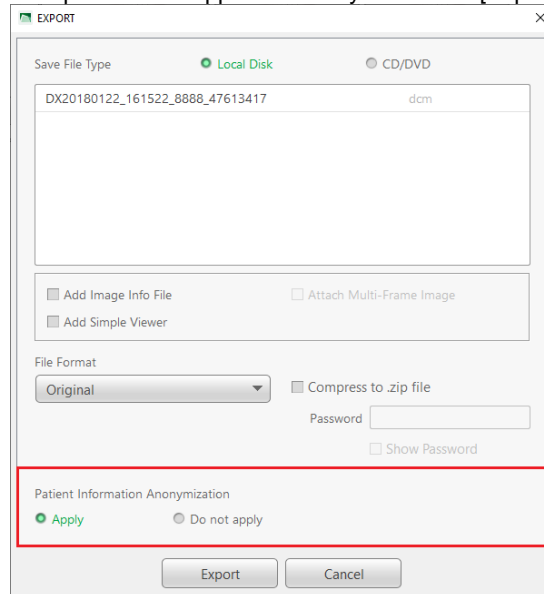
[Attach Multi-Frame Image] check box is activated only when the data includes multi-frame DICOM image.



- Chaning the name of Exporting File  
Double click or right-click on the file name. Then select [Rename] and modify the file name. However, you cannot the CT file name.



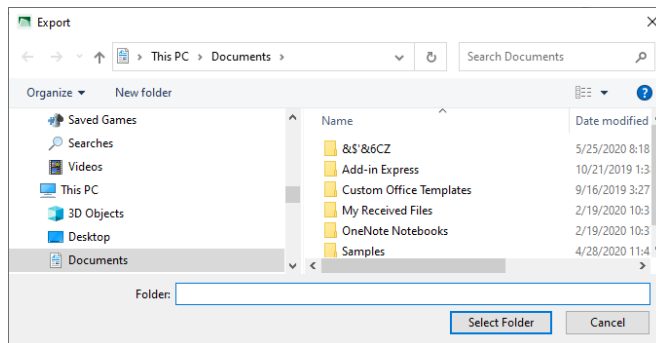
- Patient Information Anonymization  
If you have chosen to use the Privacy Policy Settings (found in [Settings > Others]), and [Export] is one of the options chosen under [Anonymize Patient Information], the option below appears when you use the [Export] function.



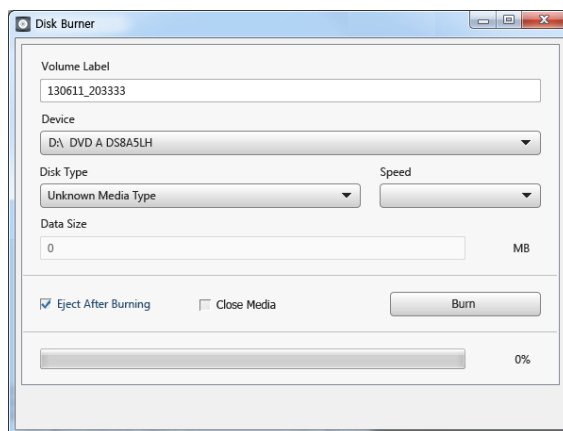
If you choose [Apply], the patient information will be anonymized in the resulting file.



- When the [Local Disk] option is selected, the [Export] window appears to choose the location where exported images should be saved.



- When the [CD/DVD] option is selected, the [DISK BURNER] window appears.



- After inserting empty CD/ DVD RW, select the disc option from [Disk Type]. If data exists on the CD/DVD RW, it deletes the existing data and rewrites over the data.
- Click [Burn] to proceed with CD/ DVD burning. If data exists on the CD/DVD RW, the following error message may appear or the CD-ROM driver may eject the CD/DVD RW.



NOTE

- The CD will be created in the Unclose condition, and the data will not be overwritten if the unclosed CD is inserted.
- If there is not writable disk, the following error message appears.



- When images are completely exported out of EzDent-i, Folder is created in the CD/DVD or local PC.

### 3.3 Export CT File

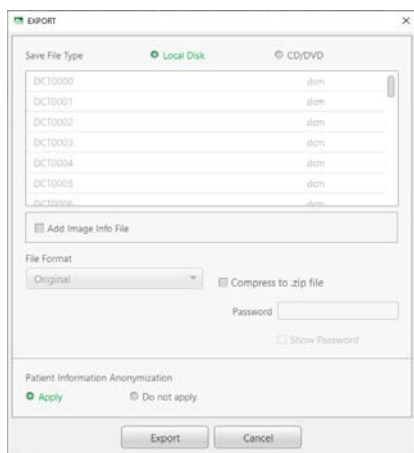
CT images saved in EzDent-i can be exported out of EzDent-i as CD/DVD or file type.

1. After selecting a CT image to export, click the main button and then the [Export CT File].

You can see the download status with the [DOWNLOAD] window.



2. The [EXPORT] window appears. Click and select the [Save File Type] option.



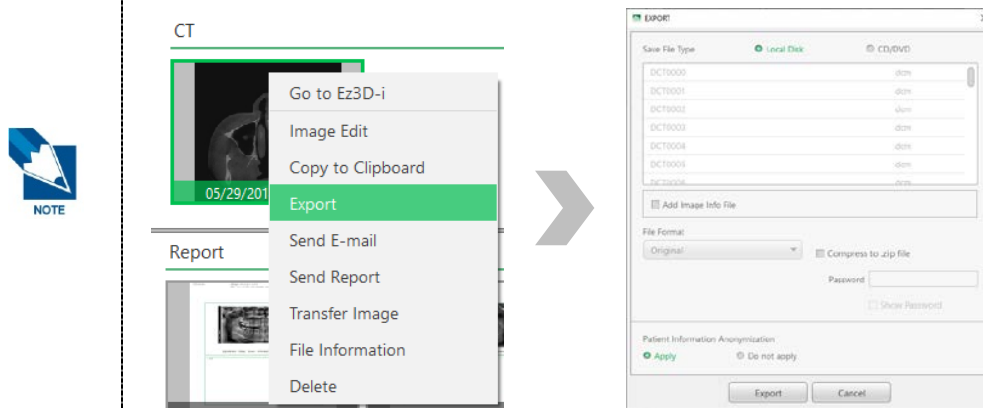
Users can either save CT file to local disk or export to CD/DVDs.

3. Checking [create zip file] allows you to [Export] all files (images, patient information) as a compressed file (.zip).

Input a password during the [Export] process to password-protect the exported file.

Password can be entered up to 12 digits.

You can also export files by right clicking on the image to open the menu. Then select the [Export] item.



### 3.4 Analysis

To open a cephalometric analysis program such as EzOrtho, OrthoVision or V-Ceph, select the Analysis in VIEWER Tab. If the Analysis program is installed and linked in Settings, it will run automatically.

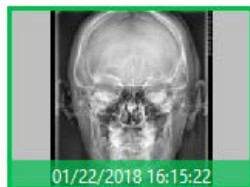


In order to link the Analysis Program, refer to the '2. EzDent-i Set Up → 2. Environment → Linkage/E-Mail'.

### 3.5 File Information

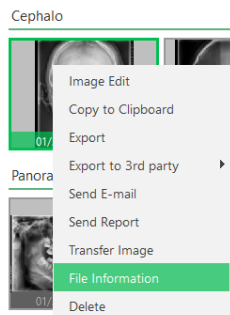
When users need to verify the image information of patient image, FILE INFORMATION option can be selected through the main menu.

1. In PATIENT tab, click the image on image which needs to be verified.

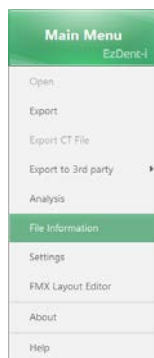


2. Select [File Information]

- Right click on the image and select File Information to arrive at the same window.



- Click the main menu and select the [File Information] menu.



## 3. The [FILE INFORMATION] window appears.

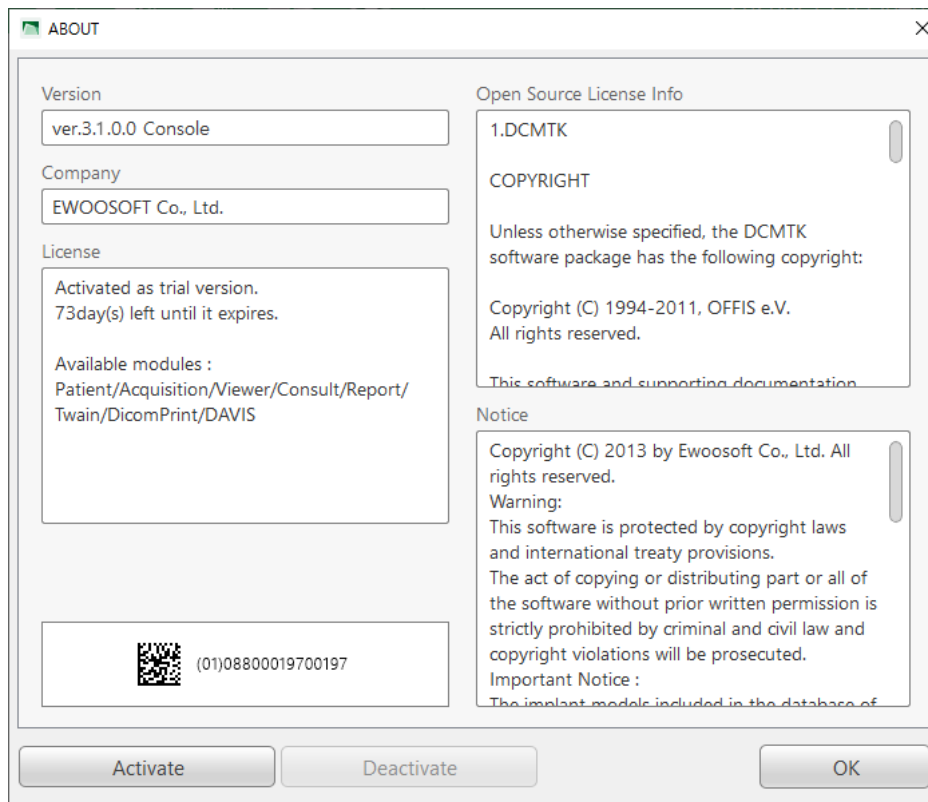
- When it comes to DICOM image, the patient information in the DICOM header file is displayed on the [FILE INFORMATION] window.
- In case that the type of the selected image is DCM (DICOM), File Information could differ from the patient record. This is because file information from the selected image is displayed based on header information of DICOM file.

## 3.6 Setting

For information about changing settings, refer to 'Chapter 2. Setting Up EzDent-i'.

### 3.7 About

The [About] menu shows information of currently installed EzDent-i.

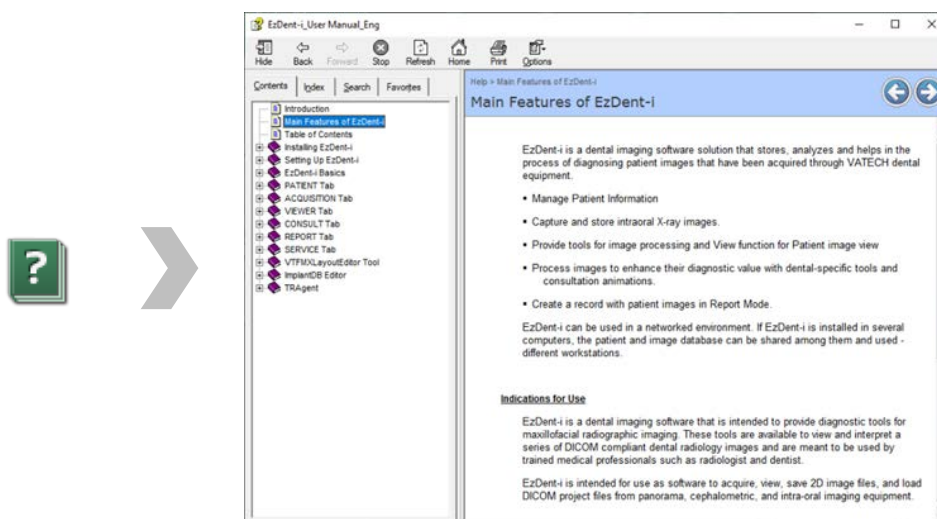


To activate the license, refer to 'Chapter 1. Installing EzDent-i -> 6. EzDent-i License Activation'.

## 4. EzDent-i Help

The help document provides detailed information on how to use EzDent-i.

1. Click the [Help] icon on the toolbar to view the help document.



## Chapter 4. PATIENT Tab

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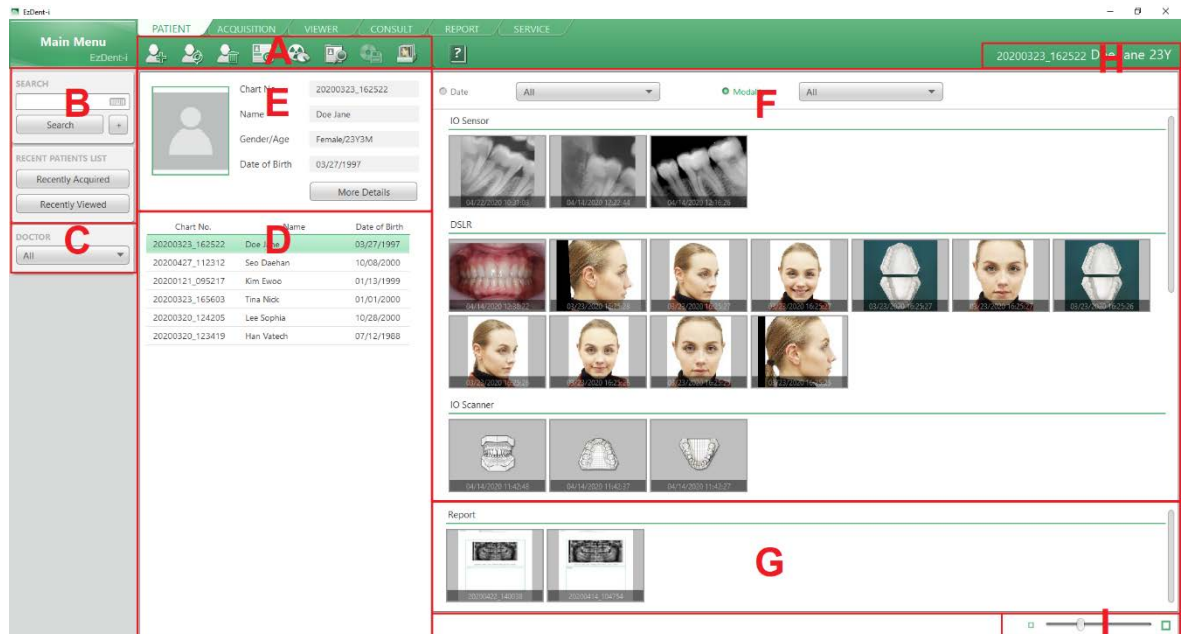




# 1. Configuring PATIENT Tab

This is a tab for patient management. From here, Users are able to manage a patient's information and images.

## 1.1 Workspace



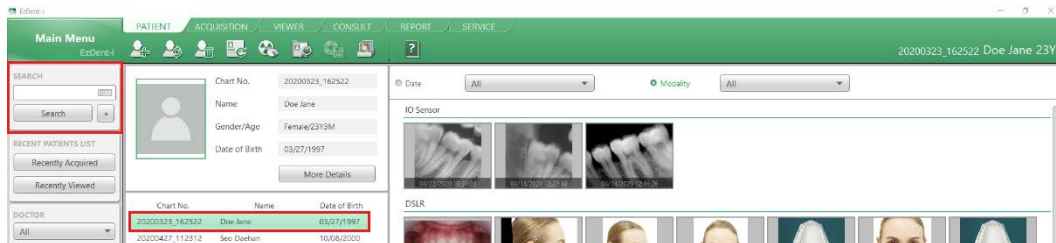
A: These Buttons are for adding, modifying and deleting patient information.

- B: SEARCH pane is used for searching for a patient or sorting patients by acquisition date or searched date.
- C: When registering patients, the patients who are assigned to the currently selected doctor are listed.
- D: When the [Search] button is clicked in the B, the search results are listed.
- E: The detailed information of the selected patient is displayed.
- F: The images of the selected patient are displayed.
- G: The reports of the selected patient are displayed.
- H: The chart number, name, and age of the selected patient are displayed
- I: User can adjust the size of the searched image through the thumbnail slider at the bottom right of the viewer window.

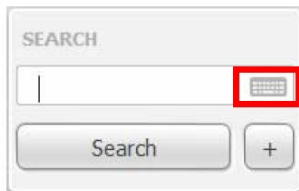
## 2. Patient Searching

### 2.1 Searching for Registered Patient

1. Enter the name or chart number of the patient in the Patient Search window and click the [Search] button or press the Enter key. The search results appear.



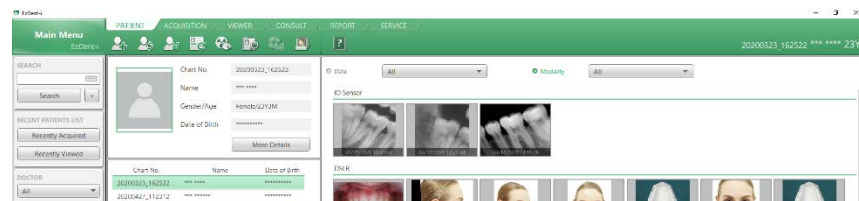
- Click the keyboard icon in the search box and the on-screen keyboard appears. Use the on-screen keyboard for searching a patient quickly and easily.



- Type the initials of saved name to search for patients. (Ex: Type "A, H" in the Search window for Audrey Hepburn)
2. Click the patient in the search result list to view the detail information about the patient.

- Anonymize Information Displayed on Screen

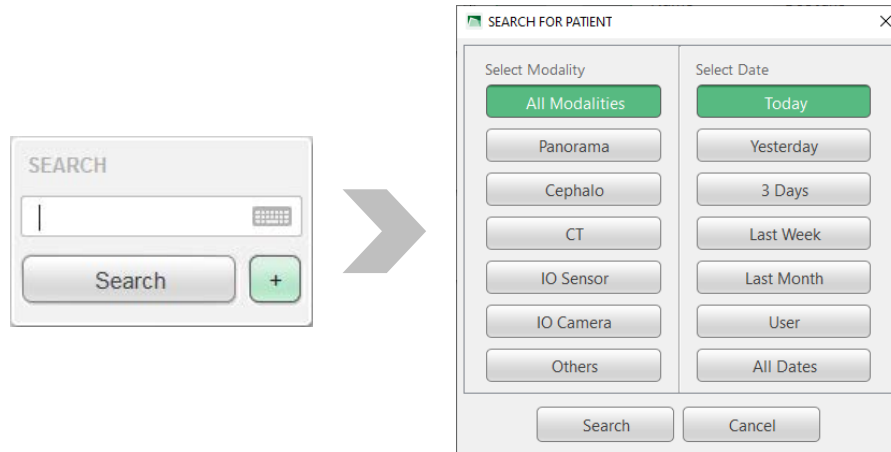
If you have chosen to use the Privacy Policy Settings (found in [Settings > Others]), the patient information displayed on the PATIENT tab will be marked with asterisks (\*).



## 2.2 Advanced Patient Searching

The advanced search can result more comprehensive search outcomes through the combination of searching by imaging mode and by date.

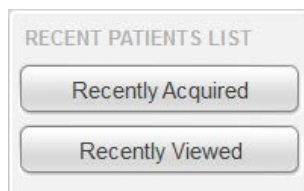
1. Click the [+] button on the right side of [Search] button. The [SEARCH FOR PATIENT] window appears.



2. Select the desired condition for searching and click the [Search] button. The results meeting the search conditions appear.
3. When selecting the patient, the patient information will change to the selected patient in the current tab.

## 2.3 Viewing Recent Patient List

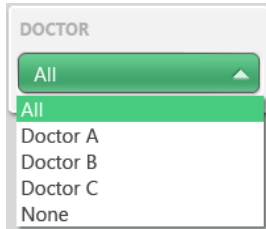
The patient list can be sorted by the acquisition date or the viewed date in the Viewer tab.



- Recently Acquired: Lists the patients by the date of acquisition.
- Recently Viewed: Lists the patients by the viewed date in the Viewer tab.

## 2.4 List of Patients by Doctor

When selecting a doctor name, the patients assigned to the selected doctor are sorted and listed.



- All: Lists all of the registered patients.
- A specific doctor: Lists the patients assigned to the selected doctor.
- None: Lists the patients not assigned to any doctor.



- The user can add, modify, or delete the doctor list at [Settings > Environment > General > USER ACCOUNT MANATER].
- Only the doctor names created with the doctor account are shown on the doctor list.

## 3. Editing Patient Info

### 3.1 Registering a New Patient

1. Click the [Add Patient] icon from the toolbar. The [ADD PATIENT] window appears.



2. Enter the patient information to the Add Patient window and click the [Add] button. The required information includes the chart number, name, and e-mail address. For other information such as the manual input of the chart number, changing the order of the name (first and last name, or vice versa) and e-mail settings can be found on '2. Setting up EzDent-i'.
  - The chart number is entered automatically, but the user can edit the chart number using alphabets, number, and '\_'. If you type alphabets in lower case, they automatically change to upper case letters, and the chart name will be saved in upper case letters in DB.
  - The doctor information is required when searching for patients by doctor. In case of not assigning a doctor, it is displayed as 'None'.
  - The fields for the first and last name are required.
  - E-mail address of the recipient is required when the Report tab sends an email. For optional information, you can add the Social ID, phone number, email, Zip code, and address.



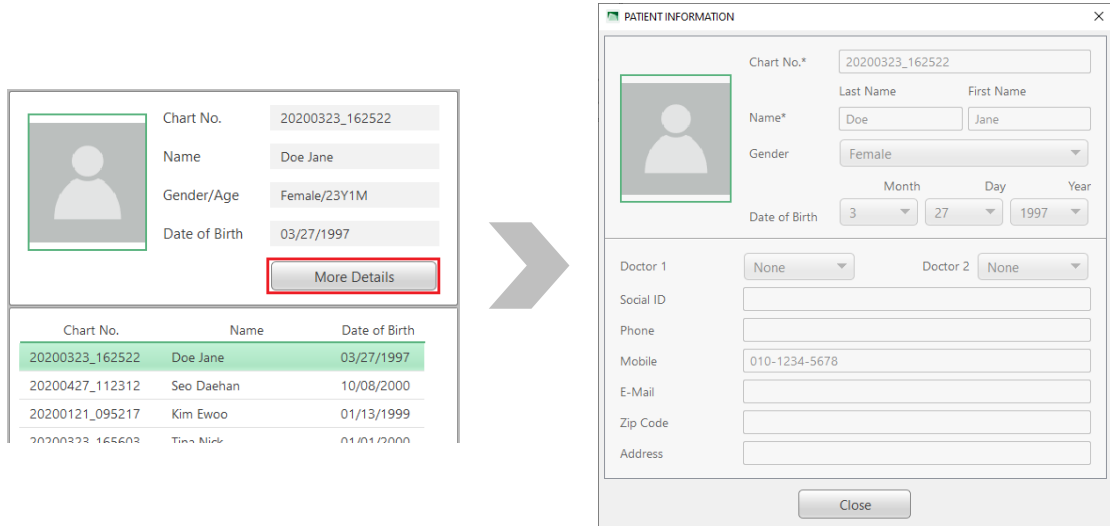
NOTE

- The user can add, modify, or delete the doctor list at [Settings > Environment > General > USER ACCOUNT MANATER].
- Only the doctor names created with the doctor account are shown on the doctor list.

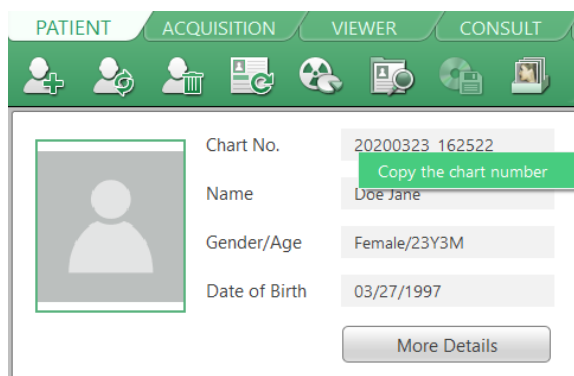
3. After the completion of this process, the patient appears in the patient search list. The patients added though the PMS linkage with EzBridge and Linkage.xml are displayed at the top of the patient list.
  - When clicking [Hide the displayed patient Information], the patient information, patient list and image list displayed on screen are hidden. To set it back as before, search a patient using [Search] feature.

### 3.2 Viewing Registered Patient Information

To view the detailed information about the selected patient in the Patient Tab, click the [More Details] button. The [PATIENT INFORMATION] window appears.


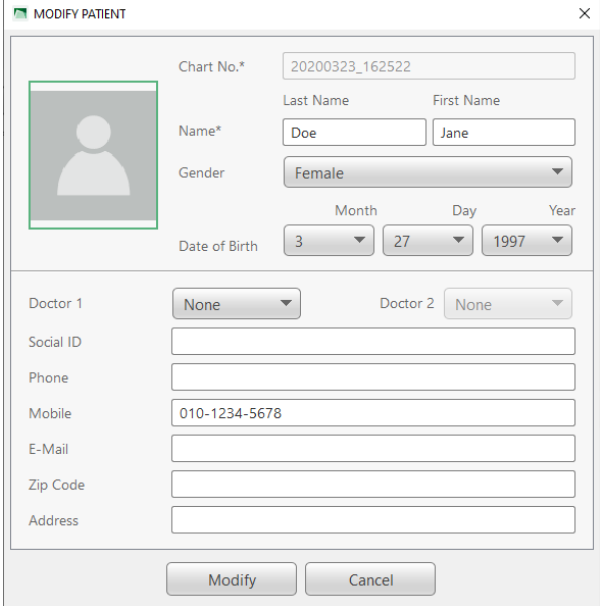


Right click the chart number and the [Copy the chart number] menu appears. Click this menu to copy and paste the exact chart number.



### 3.3 Modifying Patient Records



1. Search and select the patient data to modify from the list of search results.
2. Click the [Modify] icon in the toolbar. The [MODIFY PATIENT] window appears.

3. Modify the patient information appropriately and then click the [Modify] button. The modified patient information has been saved.

### 3.4 Deleting Patient Records

1. Search and select the patient data to delete from the list of search results.
2. Click the [Delete] icon on the toolbar. The [DELETE PATIENT] window appears. Enter the password for deleting a patient record.

3. 'Succeeded to delete' message appears and the patient record is deleted.



The initial password of EzDent-i is '0000'. The user can change the password at [Settings > Environment > General > USER ACCOUNT MANAGER].

## 4. Exporting to Acquisition Information

The information such as exposure time, kVp, mA, DAP by patient, modality, and period can be exported. The [Export to acquisition information] function allows to check the number of acquisition by modality.

1. Select the [Export to acquisition information] icon on the tool bar.



2. Select the ID and enter the password. Click the [OK] button.

3. The [EXPORT TO ACQUISITION INFORMATION] window appears. Select the PATIENT, Modality, and PERIOD, and then click the [Export] button.

- PATIENT
  - All Patient: Export acquisition information for all registered patient.
  - Selected Patient: Export acquisition information for selected patients.
- Modality: Select modality.
- PERIOD: Select period.



▪ Patient Information Anonymization

If you have chosen to use the Privacy Policy Settings (found in [Settings > Others]), and [Export] is one of the options chosen under [Anonymize Patient Information], the option below appears when you use the [Export Acquisition Information] function.



If you choose [Apply], the patient information will be anonymized in the resulting file.

- Specify the name and the saving location for the acquisition list file, and click the [Save] button. The acquisition information is saved in an Excel file (\*.csv).

No	Chart No	Patient's Birthday	Social ID	Doctor	Image Type	kVp	mA	DAP(dGyC Exposure	Date
User Image List									
DAP SUM(dGyCm^2)									
4	Panorama	: 8	5.7056						
5	Cephalo	: 0	0						
6	CT	: 1	6.3654						
7	IO Sensor	: 7	0						
8	IO Camera	: 1	0						
9	Image Plate	: 0	0						
10	DSLR	: 0	0						
11	3D Photo	: 0	0						
12	Impression	: 0	0						
13	Capture	: 2	0						
14	Other	: 0	0						
15	Total DAP Sum	:	12.071						
18	1	20150227_test1	01/01/2015 00:00:00		Panorama	67	10	0.7132	02/27/2015 16:47:07
20	2	20150226_test1	01/01/2015 00:00:00		Panorama	67	10	0.7132	02/26/2015 15:18:41
22	3	20150226_test1	01/01/2015 00:00:00		Panorama	67	10	0.7132	02/26/2015 14:46:06
23	4	20150226_test1	01/01/2015 00:00:00		Panorama	67	10	0.7132	02/26/2015 15:14:11
24	5	20150226_test1	01/01/2015 00:00:00		Panorama	67	10	0.7132	02/26/2015 15:15:50
25	6	20150226_test1	01/01/2015 00:00:00		Panorama	67	10	0.7132	02/26/2015 13:59:12
26	7	20150226_test1	01/01/2015 00:00:00		Panorama	67	10	0.7132	02/26/2015 14:29:10
27	8	15 last name 12/31/195	1234567		IO Sensor	0	0	0	01/28/2015 17:18:31
28	9	15 last name 12/31/195	1234567		IO Sensor	0	0	0	01/28/2015 17:18:54
29	10	15 last name 12/31/195	1234567		IO Sensor	0	0	0	01/28/2015 17:19:11
30	11	15 last name 12/31/195	1234567		IO Sensor	0	0	0	01/28/2015 17:19:20
31	12	11 te st	01/01/2015 00:00:00		IO Camer	0	0	0	02/27/2015 10:44:21
32	13	11 te st	01/01/2015 00:00:00		Panorama	67	10	0.7132	02/27/2015 10:45:50
33	14	11 te st	01/01/2015 00:00:00		IO Sensor	0	0	0	02/27/2015 10:46:35

- Information that can be checked through the [Export to acquisition information] function : Chart Number, Patient name, DOB, Social ID, Doctor, Image Type, kVp, mA, DAP, Exposure time, and Date.
- The items without kVp, mA, and DAP information are displayed with the default value "0".
- DAP Sum is displayed to four decimal points and as the same value with the Excel Sum value.

## 5. Exporting Patient Information

Users can view patient information and export patient information as a .csv or .zip file.

1. Click [Export Patient Information] icon from the toolbar.



2. Enter ID and password to view patient information.

EXPORT PATIENT INFORMATION

Patient Information

Field	Value
Last Name	Doe
First Name	Jane
Gender	Female
Date of Birth	03/27/1997
E-Mail	
Social ID	
Phone	
Zip Code	
Address	
Mobile	010-1234-5678

Compress to .zip file

Password

Show Password

Export Cancel

3. Click [Export] button and set the path to export the patient information as a .csv file.



Checking [Compress to .zip file] allows you to [Export] all files (images, patient information) as a compressed file (.zip).

- Input a password during the [Export] process to password-protect the exported file.

## 6. Exporting

Users can export images saved in EzDent-i to their local PC or CD/DVD using [Export] icon from the toolbar.



Refer to 'Chapter 3. EzDent-i Basics > 3. EzDent-i Main Menu > 3.2 Export' for the details.

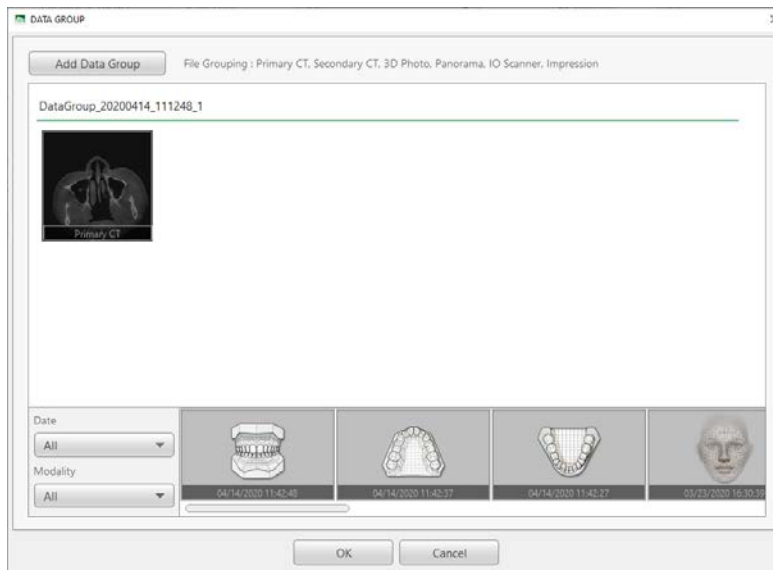
## 7. Data Group

2D and 3D images of a patient can be managed as a data group and the grouped data can be sent together to Ez3D-i.

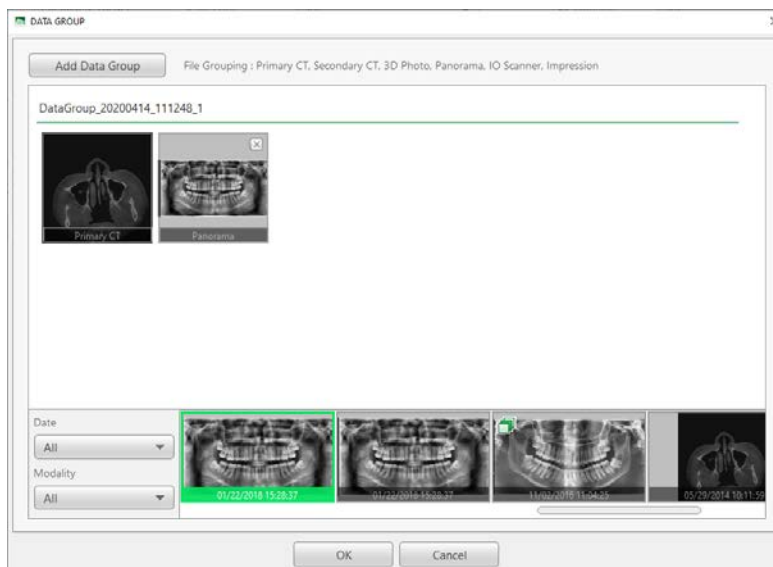
1. Select the [Data Group] icon on the tool bar.



2. The [DATA GROUP] window appears. Select the [Add Data Group] button to create a new data group.



3. Drag and drop the images at the bottom of the dialog to the boxes in the data group.

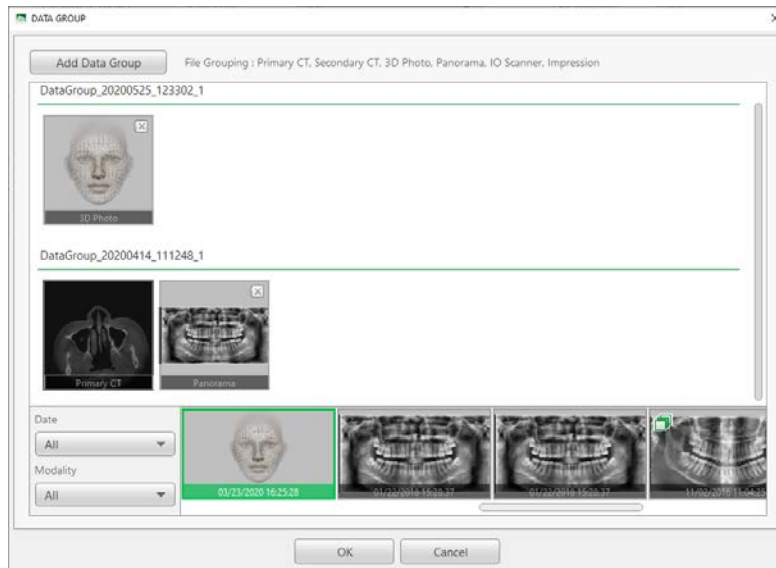


- Panorama image which is acquired with CT image is automatically allocated to the same Data Group with the CT and is unable to be deleted after automatic allocation.
- CT image already allocated as primary CT cannot be allocated as secondary CT.

- An error message occurs when the user adds more than two images with the same data type.

However, you can add more than two IO scanner images or impression images in the same data group.

- Click the [Add Data Group] to add more data groups in the [DATA GROUP] Dialog.



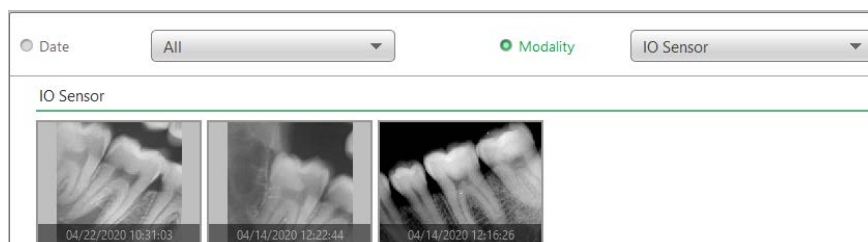
- CT Image cannot be added to more than one Data Group.
  - A data group will be deleted when all images included in the data group are deleted.
- Click one of the CT images which is included in a data group on the Patient Tab to open the CT data with other grouped images in Ez3D-i.

## 8. Classifying Images of Registered Patients

### 8.1 Classifying Images of Registered Patients

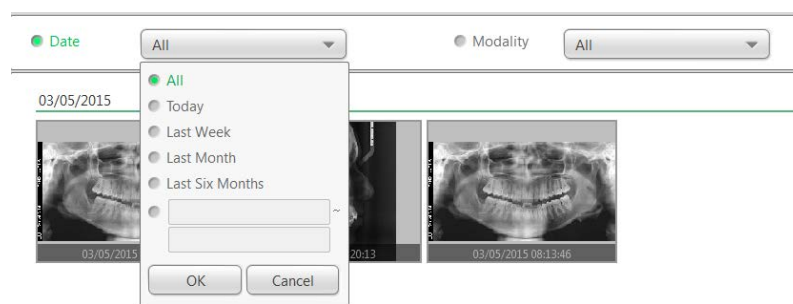
The patient images can be sorted out by Date or by Modality.

1. Search and select a patient.
2. Select the date or enter a period in the area of patient images. And then, the images which meet these conditions are displayed.



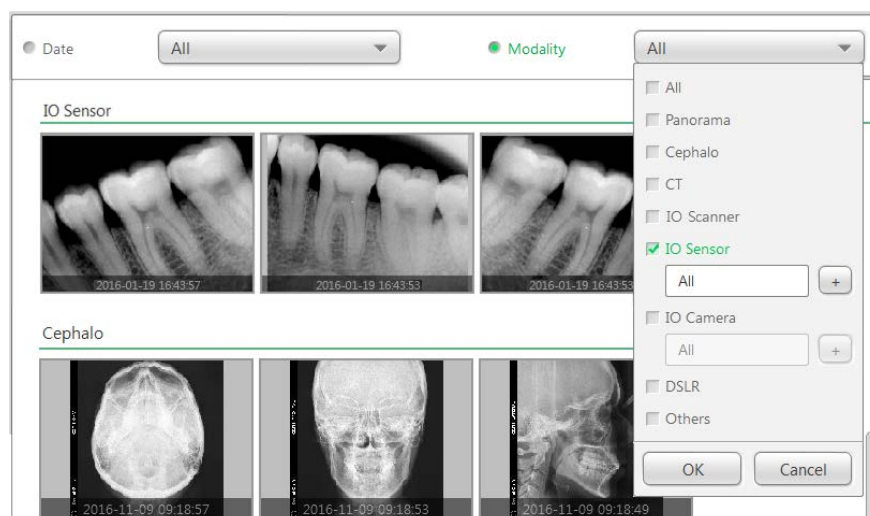
- **Search by Date**

The images are listed from the recent data, and are displayed in the order of acquisition time within the list.

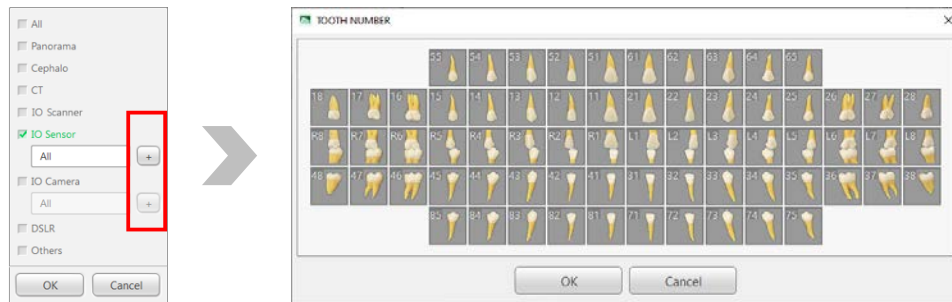


- **Search by Modality**

The images are listed by modality and are displayed in the order of acquisition time within the list.



- When using the IO Sensor or IO Camera option on the searching option, click the [+]  
button to view the numbered teeth. Select the number in the numbered teeth, the  
images which meet the condition displays.

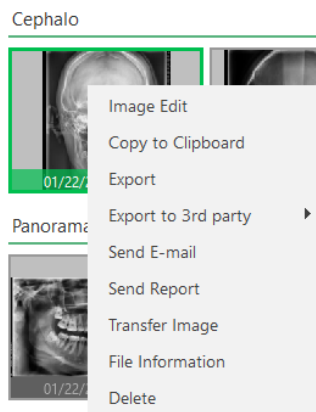


Double click an image to display the image on the viewer window.

- To open CT images, a 3D Image Viewer runs automatically. In case that the 3D Imaging Viewer of Vatech, Ez3D-i, is installed on the same PC, Ez3D-i is opened. Because EzDent-i is linked with Ez3D-i by default, user doesn't need to set it up in any fashion.

## 8.2 Managing Patient images

Right click on the patient image from the patient image list. A dropdown menu with your image management options will appear.



- Image Edit

From here, users can calibrate, rotate or Initialize the image.

- Copy to Clipboard

Users can copy the selected image to the Clipboard.

- Export

Users can export images saved in EzDent-i to their local PC. For more details, user can refer to 'Chapter3. EzDent-i Basic'.

- Send E-mail

The selected image is automatically attached and sent by email.

Press the <Ctrl> key on the keyboard to select multiple images to be attached.

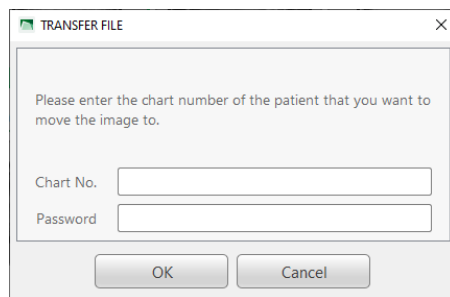
- Send Report

The selected image is automatically inserted into a Report. At this time, the images are inserted in Fit size.

- Transfer Image

An image which is saved under one patient can be transferred to another patient. At this time, the acquisition date and image information (modality and position) are maintained, and the acquisition date and the image information cannot be modified. To modify the acquisition information, user should change the information directly using the Image Editor.

1. Right click on the desired image. The list will appear. And then, select the [Transfer Image] option.
2. Enter the Chart No. and Password of the patient that the transferred image of will be saved.



- The initial password of EzDent-i is '0000'. The user can change the password at [Settings > Environment > General > USER ACCOUNT MANAGER].
- Press the <Ctrl> key on the keyboard to select multiple images.

3. When the [MESSAGE] window appears, click the [OK] button. The Image transfer is completed.

- File Information

Users can verify the file information of the selected image.



Users can verify the file information of the selected image with 'Main menu → [File Information].'

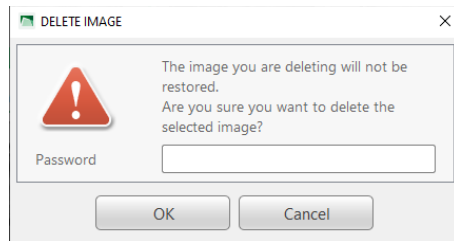
- Delete

Users can delete the selected image from the DB.

1. If the user wants to delete more than 2 images, hold the <Ctrl> key on the keyboard and click the desired images from patient image list, then Right Click and select Delete.
2. Right click on the desired image for deletion. Select [Delete] from the list menu.











3. When [DELETE IMAGE] window appears, enter the password and click the [OK] button. The Image Deletion is completed.



The initial password of EzDent-i is '0000'. The user can change the password at [Settings > Environment > General > USER ACCOUNT MANAGER].

## 9. Tools

### 9.1 Main Tools

Icons	Designation	Description of Features
	Add	Add new patient.
	Modify	Edit the information or images of the registered patient.
	Delete	Delete the registered patient.
	Hide the displayed patient information	Reset the searched results and hide the image.
	Export to acquisition information	Export the values of kVp, mA, DAP, DAP SUM, and exposure time for all patient or a selected patient to an Excel file.
	Export Patient Information	Export selected patient information
	Export	Export selected patient images.
	Data Group	Group 2D and 3D data

## Chapter 5. ACQUISITION Tab

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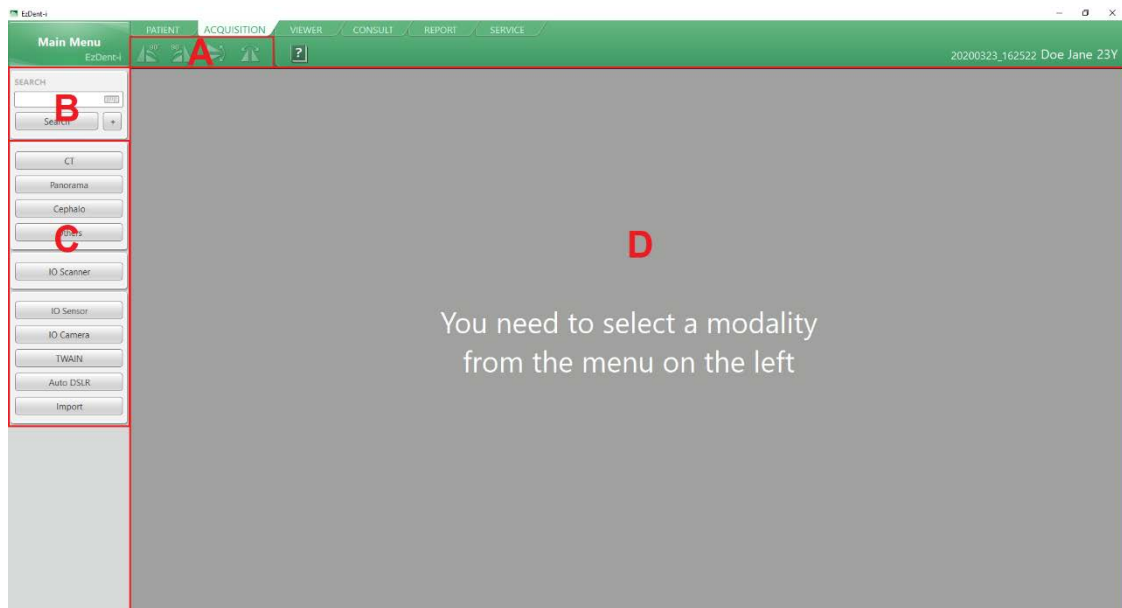


## 1. Configuring ACQUISITION Tab

The Acquisition Tab provides the function to capture images with CT, Panorama, Cephalo, IO Sensor, and IO Camera equipment. The images can be stored on the EzDent-i server. An image can be imported from the PC server or local PC and saved as a patient image.

EzDent-i supports the maximum resolution that the acquisition equipment when acquiring through dental cameras other than 2D, 3D Imaging Systems, IO Sensor, IO Camera, and Twain.

### 1.1 Workspace



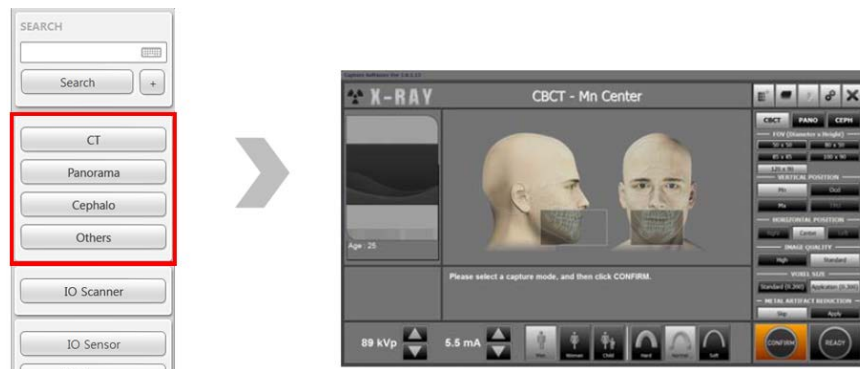
- A: These buttons are for editing (rotation) for the images.
- B: Search pane is used for searching for a patient. Whatever tab the user is working on, the SEARCH pane is fixed so that the user can search for another patient at any time.
- C: The user can select the modality and import or save the images.
- D: The user can preview the captured images before saving.

## 2. Acquiring Images Using Extraoral X-ray System

To acquire images with CT, Panorama, or Cephalo acquisition equipment, EzDent-i Console should be installed, not EzDent-i Client. If it is installed properly, buttons for choosing modality type are displayed. To acquire images with the patient please see below.

1. Click the button of the desired extraoral X-ray system. The image acquisition program appears.

If you want to acquire images in the 3D Photo or Model Scan mode, click the [Others] button to display the image acquisition program.



2. Set the image acquisition program as desired and click the [Confirm] button.
3. Click the [Ready] button and take an image with the exposure switch. The captured image appears on the screen.



All the latest equipment manufactured by Vatech utilizes the image acquisition program to acquire images. Refer to the Vatech equipment manual for the user instruction and related information about the image acquisition program.

### 3. Acquiring Images Using IO Scanner



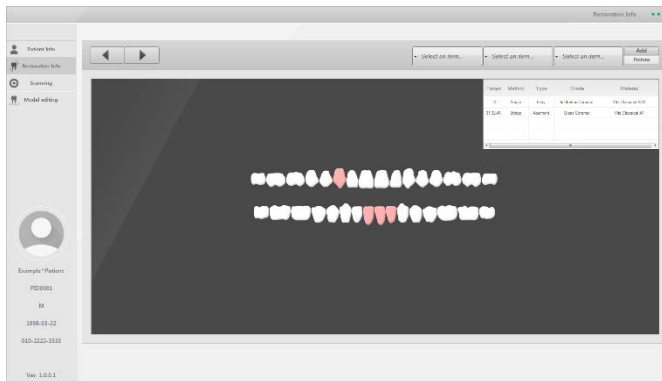
NOTE

IO Scanner console program should be installed on the PC to acquire images from IO Scanner. Please refer to the manual of IO Scanner program for the user instruction and related information.

1. Click [IO Scanner] button on the Acquisition Tab.



2. The IO Scanner program starts as follows.



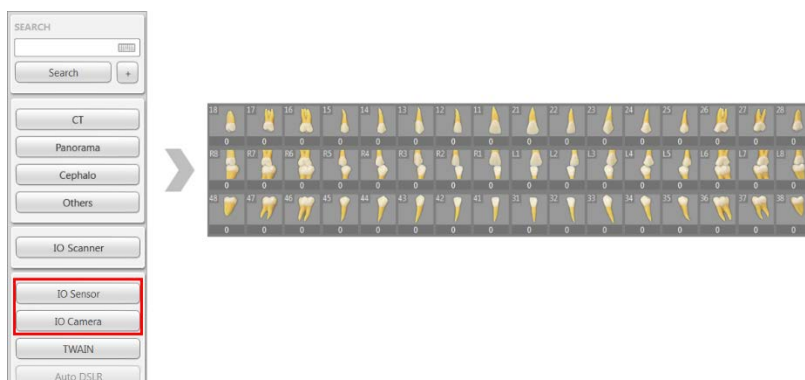
## 4. Acquiring Images Using Intraoral X-ray System

### 4.1 IO Sensor / IO Camera



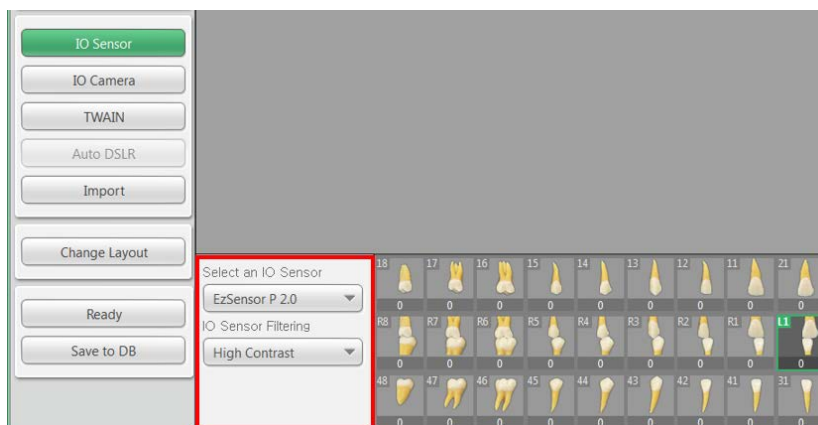
To acquire images with IO Sensor, the IO Sensor driver should be installed on your PC. Please refer to the IO Sensor manual or IO Camera manual for more information.

1. Click the [IO Sensor] or [IO Camera] button in the ACQUISITION tab. Once the IO sensor or IO camera is connected, template where the acquired image is located is changed. The numbered teeth are displayed on the screen.



2. Depending on the connected device, the image processing options can be selected before the image acquisition.

(1) IO Sensor: the IO Sensor and the IO Sensor Filtering option can be selected.



- IO Sensor: It lists the IO Sensors that are currently connected. It lists up to four IO Sensors, and user can select the desired IO Sensor device.
- IO Sensor Filtering: The filtering options that the selected IO Sensor device provides can be selected. If the v6.5 or lower version of Rayence Sensor driver is installed, the device or image processing options cannot be selected and the images cannot be acquired when two or more IO Sensor are connected to the PC.

(2) IO Camera: When acquiring images with IO Camera, EzDent-i supports the maximum resolution of the equipment.

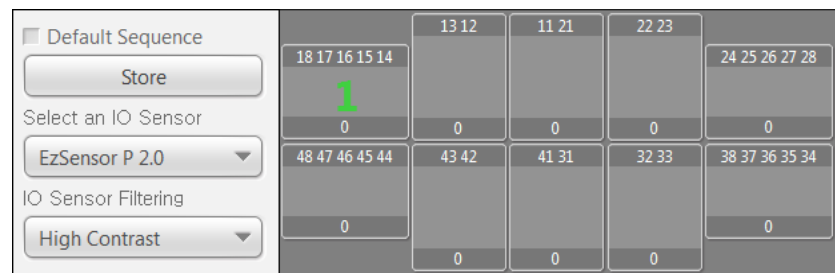
(3) DSLR: The maximum size of DSLR images are up to 1920 X 1080 (Full HD). If a user saves image that exceeds the maximum size, the size of image will be automatically adjusted to 1920 X 1080.



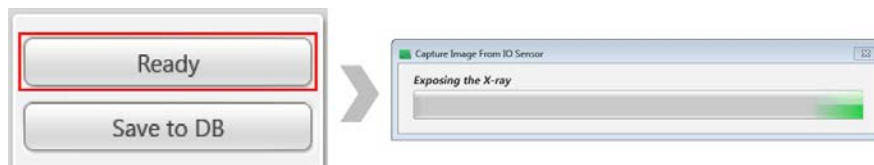
3. Change the layout to capture multiple images continuously. Click the [Change Layout] button and the [CHANGE LAYOUT] window appears. Select the desired layout.

If FMX type layout is selected, user can also select the Default Sequence option. The Default Sequence option is available for both IO Sensor and IO Camera, and for only the corresponding FMX layout, the designated sequence is saved by clicking the [Store] button.

- Select [Default Sequence]: The order to locate the acquired image from IO Sensor is set by default.
- Unselect [Default Sequence]: User can define the order to locate the acquired image from IO Sensor. Click the FMX one by one. This would then become a manual selection by the User.



4. Click the [Ready] button after positioning a patient.



- By double clicking the workspace of ACQUISITION tab, EzDent-i can be ready for imaging acquisition. This has the same function as clicking the [Ready] button.
5. If IO Sensor or IO Camera equipment is connected properly, the image acquisition mode is initiated
    - When using the IO Sensor, shoot the x-ray using the exposure switch
    - When using the IO Camera, press the capture switch to acquire image.
    - When using the IO Camera, user can use the keyboard. Under the 'Main Button > Settings > Acquisition > General', set [IO Camera Acquisition Key Setting], and the user can use the keyboard to acquire IO Camera images.
    - When acquiring images with IO Sensor, IO Camera, or Auto DSLR, the last acquired image appears as the first image in the FMX frame or in the Thumbnail list by default.
  6. For a continuous capture mode, all captured images are located in the first tooth selected. Drag and drop the captured images to each proper tooth location.
    - In the Teeth Mode or the FMX layout of the IO Sensor, double click the right button of the mouse for a continuous capture.
    - When acquiring after setting the FMX sequence, the re-acquisition can be possible
  7. Select images from the thumbnails, and then click the [Save to DB] button. The captured images will be stored in the DB.
    - If user wants to select more than 2 images, first hold the Ctrl key on the keyboard and click the desired images displayed on thumbnail.

- To change the way you store acquired images, change the option in settings. With the option, [Auto DB Save], automatically all acquired images are stored in DB.

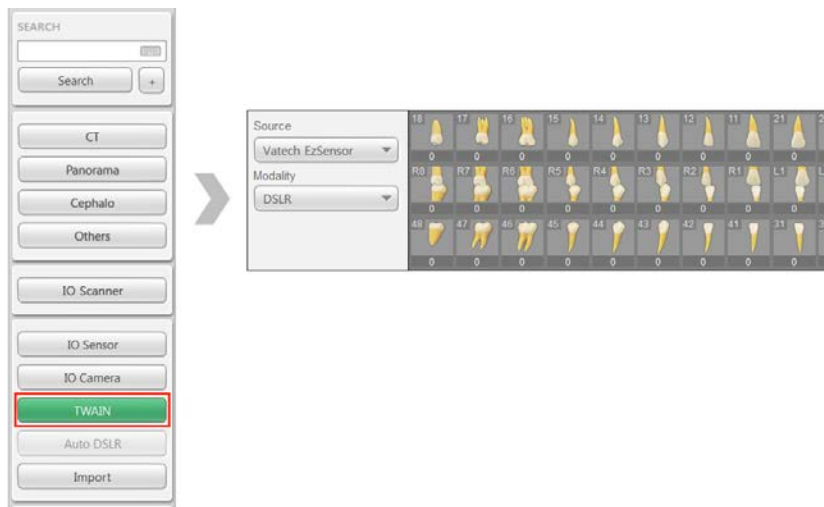


Images acquired by IO Sensor are saved in DICOM file format.  
Importing IO Sensor images will save the image in original file formation.

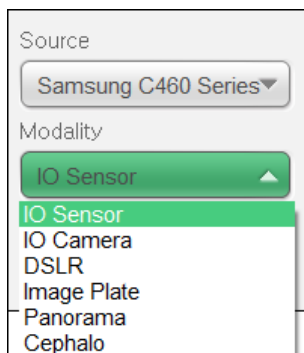
## 4.2 Twain

TWAIN is the standard image acquisition driver that connects the image acquisition software and image acquisition devices (scanner or digital camera). For any image acquisition devices supporting TWAIN, the image acquisition through EzDent-i is possible.

- Click the [TWAIN] button from the Acquisition tab. The screen will change when ready for TWAIN.



- Click the [Source] and [Modality] dropdown menu and select the source and equipment type.

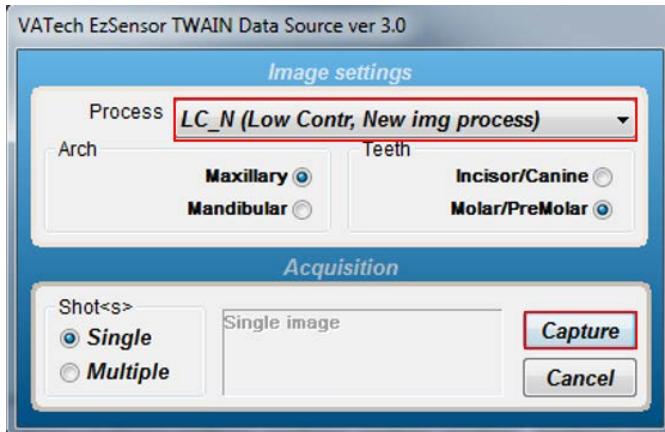


- Click the [Acquire] button.



- If the [Acquire] button is not displayed, scroll up the mouse wheel to make it shown.

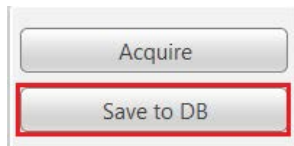
- When the TWAIN window appears, select the imaging option provided by the equipment and click the [Capture] button.



NOTE

- The TWAIN sample image above has been obtained with EzSensor, the digital IO sensor from VATECH. Please refer to the user manual of other devices using TWAIN image acquisition methods.
- If there are two or more drivers for TWAIN, the program saves the last device that a user uses.

- Acquired images appear in the thumbnail list.
- Select the acquired images by clicking on the thumbnails and store them to the EzDent-i server. To select multiple images, select the images while holding down the Ctrl key. After selecting images, click the [Save to DB] button.

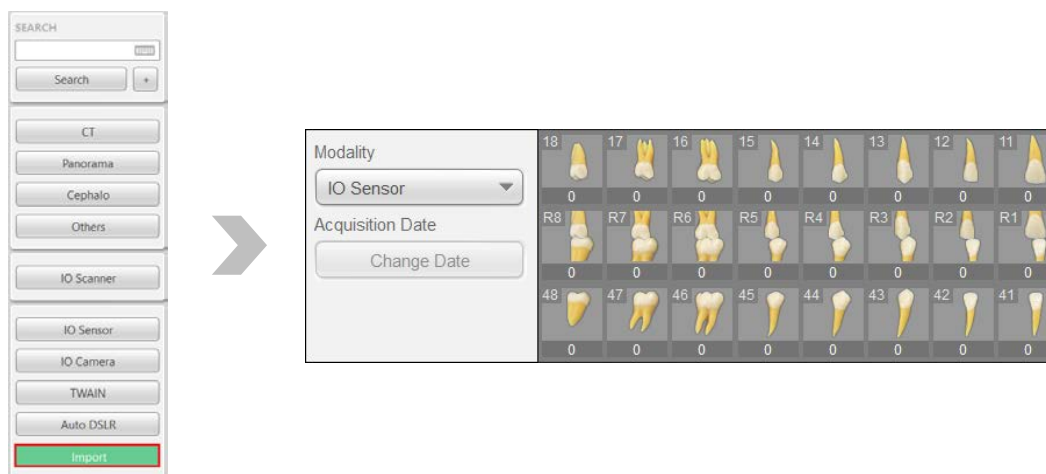


- If a modality changes while loading TWAIN images, only the unsaved images are moved to layout in where the modality is changed.
  - The layout cannot be changed while acquiring with TWAIN if the modality is set to Ceph or Panorama.
- The acquired image is normally saved to DB, a separate window appears to inform the user that the image is saved successfully.

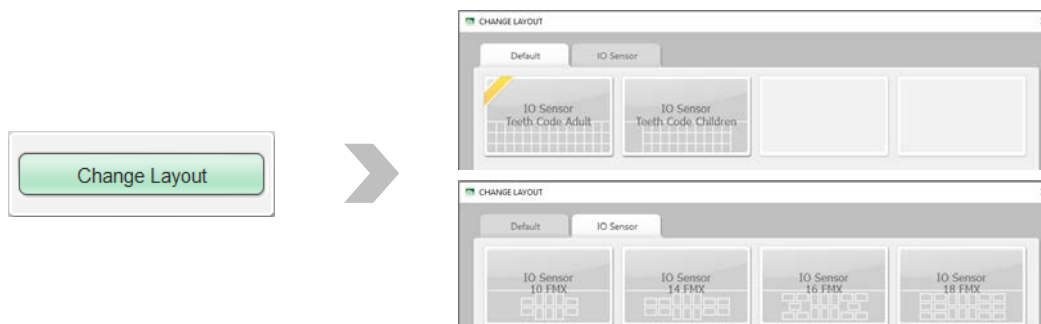
## 5. Importing Images from Local PC to EzDent-i Server

Images already captured and saved in the local PC are imported and saved to EzDent-i for each appropriate patient.

1. Click the [Import] button from the Acquisition tab. The screen is modified to fit [Import]. Then, select the equipment type as shown below.



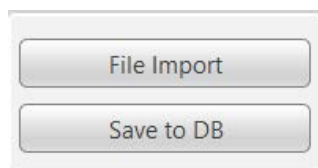
2. If needed, click the [Change Layout] button and select the desired layout. The layout is modified according to the new layout selection.



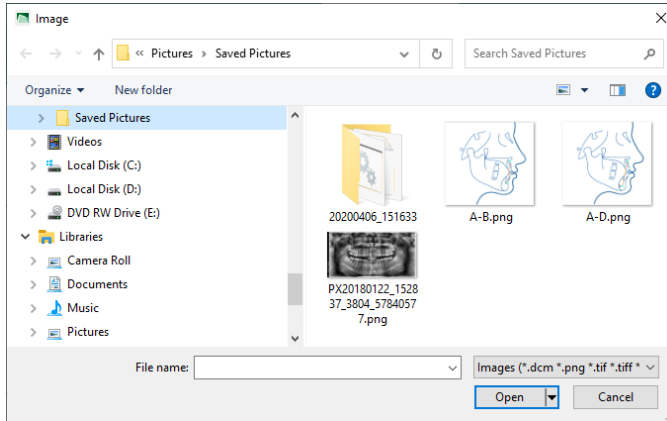
NOTE

For the Teeth Code layout, the “Teeth Code Adult” layout is automatically applied if the patient’s age is 13 or over, and if the patient is younger than 13 years old, the “Teeth Code Children” layout is automatically applied. But if the layout is changed through the [Change Layout] button, the Teeth Code layout can be applied regardless of the age.

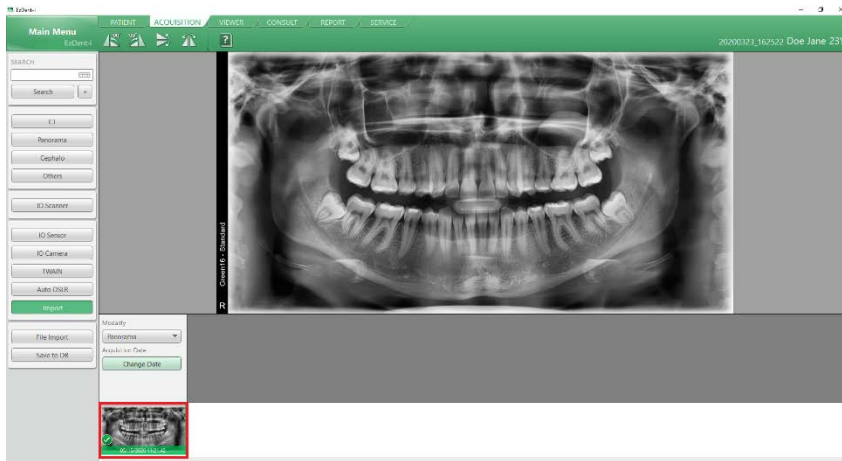
3. To Import the images stored in the local PC, click the [File Import] button. The [Image] window appears.



4. Select all desired images to import. If user wants to select more than 2 images, hold the <Ctrl> key on the keyboard and click the desired images.



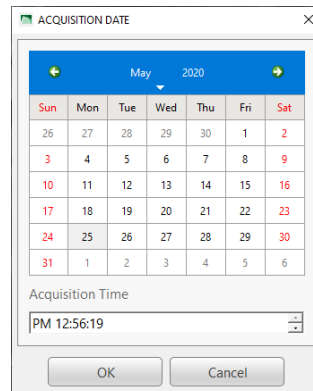
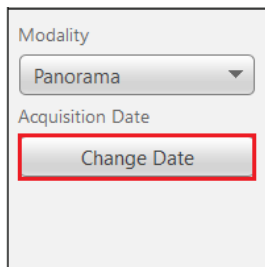
5. Upon completion, the imported images are shown on the thumbnail filmstrip as shown below.



If there are multiple images in the FMX or Teeth Box, scroll the mouse wheel or click the left/right arrows to move between images, and the image is displayed accordingly.







To Change the acquisition date and time of the imported image, click the [Change Date] button. But, when changing dates of only two images out of five imported images, the date and time will not be applied to the three images unselected.



6. Select the acquired images by clicking on the thumbnail to save to EzDent-i server. Click the [Save to DB] button to save the images to DB. If user wants to select more than 2 images, hold the Ctrl key on the keyboard and click the desired images.
7. The acquired image is normally saved to DB. A separate window appears to confirm that the image is saved successfully.

## 6. Tools

### 6.1 Main Tools

Icons	Designation	Description of Features
	90° CCW	Rotate 90 degree counter clockwise
	90° CW	Rotate 90 degree clockwise
	Flip Vertical	Flip the image vertically
	Flip Horizontal	Flip the image horizontally



After changing the direction of the image, click the [Save to DB] button to view the image with the new directional orientation in EzDent-i. It does not change the original image stored in the server.





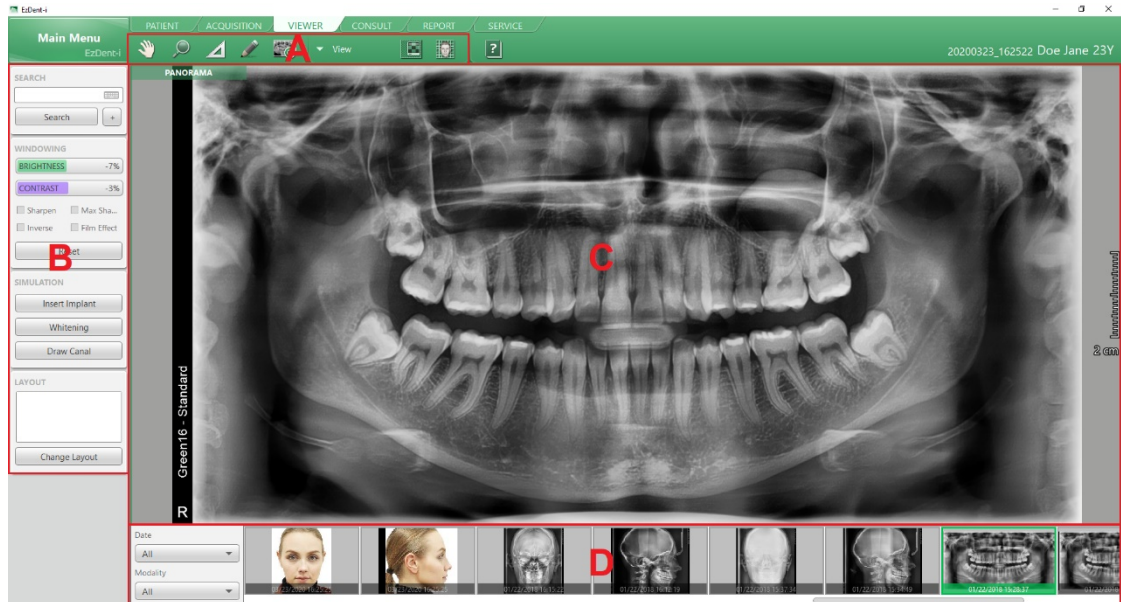
## Chapter 6. VIEWER Tab

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# 1. Configuring VIEWER Tab

## 1.1 Workspace



- A: These buttons are for measuring, zooming, moving the images.
- B: This pane is used for windowing images and performs simulation.
- C: The selected images are previewed and the user can view the windowing and simulation results.
- D: This pane shows the images for the selected patients in thumbnail.

## 2. Windowing

Through the Windowing function of EzDent-i, user can adjust the brightness and the contrast of images, and also can give sharpen, inverse, and film effect to the images.

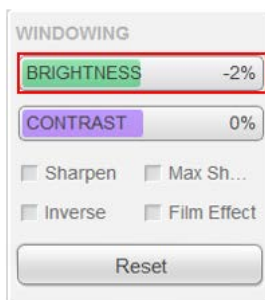


Windowing effect is also applied to the image displayed on the CONSULT tab and the REPORT tab.

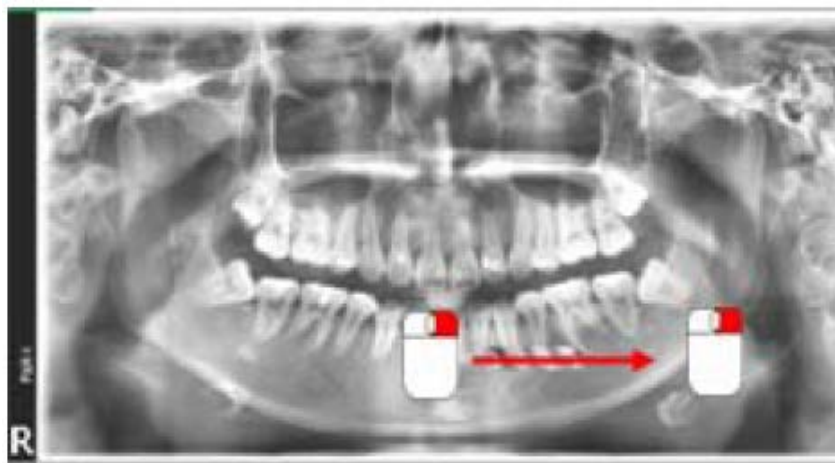
However, the windowing effect modified after the image is opened on the report is not applied.

### 2.1 Adjusting Brightness

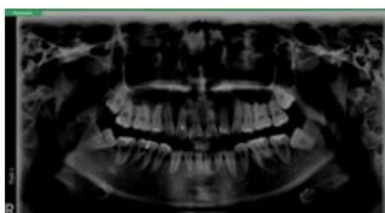
The [BRIGHTNESS] option makes an image brighter or darker.



- To adjust the level of brightness, move the [BRIGHTNESS] slider to the left or right. Or, right click and drag the mouse left or right.



- Comparison of brightness -100 image and brightness 100 image is as below.



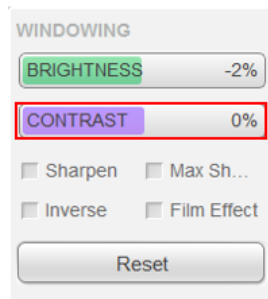
Brightness -100



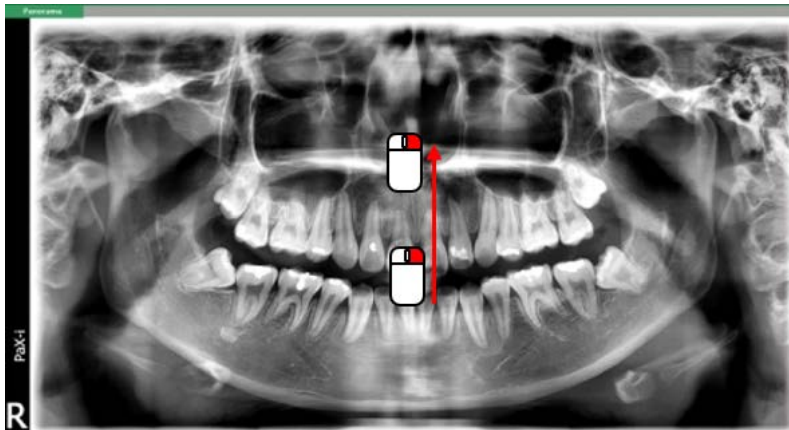
Brightness 100

## 2.2 Adjusting Contrast

The [CONTRAST] option makes distinctive comparison of black and white region of an image. Higher contrast makes black pixels more black and white pixels whiter. Image details are much clearer with the effect of contrast. Blurry nerve or anatomical structures become more clearly distinguished.



- To adjust the level of contrast, move the [CONTRAST] slider to the left and right. Or, right click and drag up or down to adjust the image contrast.



- Comparison of contrast -100 image and contrast 100 image is as below.



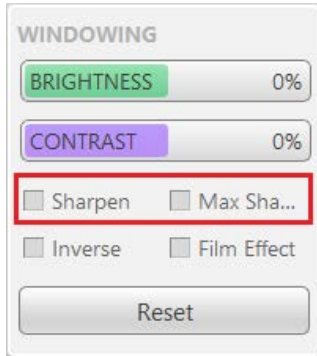
Contrast -100



Contrast 100

## 2.3 Adjusting Sharpness

Image details are further emphasized with the effect of image sharpness. Blurry nerve or anatomical structures become more clearly distinguished. To apply the [Sharpen] option, select Sharpen. If user wants to increase the sharpen effect, select the [Max Sharpen] option.



- Comparison of images between not applied and applied Maximum Sharpness effect is shown below.



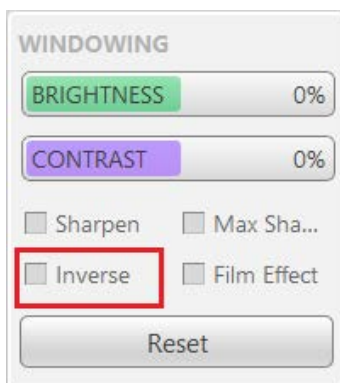
Original Image



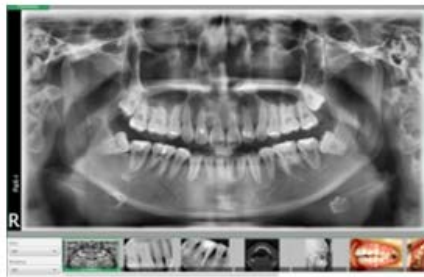
Maximum Sharpness Image

## 2.4 Inverting Black and White

This is a function to inverse black pixels to white, and white pixels to black.



- To apply Inverse, select Inverse. A comparison between an original image and its inverse is shown below.



Original Image

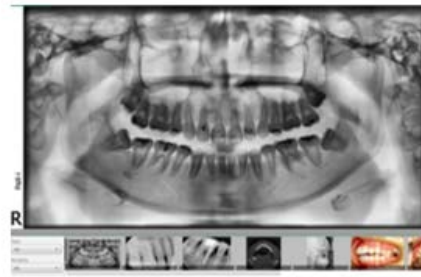
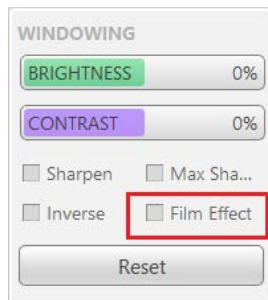


Image with Inverse Effect applied

## 2.5 Applying Film Effect

If the user wants Film type image, the [Film Effect] option can be selected.



- To apply Film Effect, select it. A comparison between an original image and an image with film effect is shown below.



Original Image

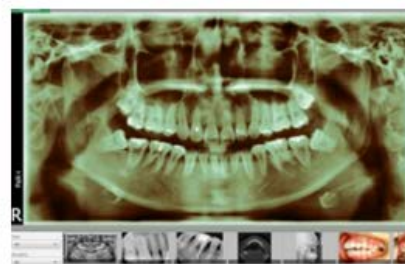
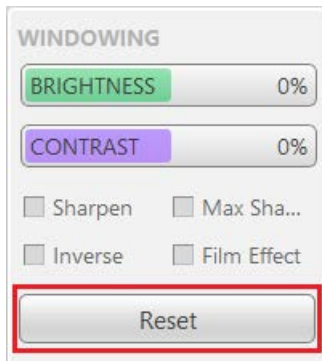


Image with Film Effect applied

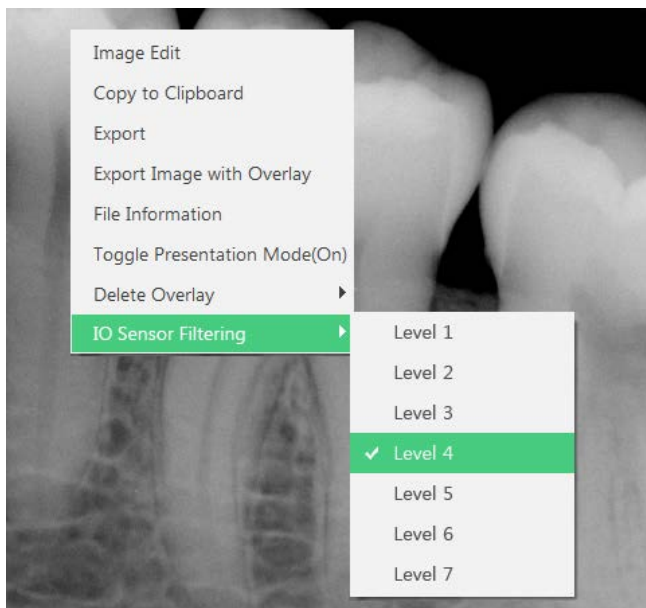
## 2.6 Reverting to the Original State

Revert all applied effects and initialize the image to the original state.



## 2.7 IO Sensor Filtering

For images acquired by IO sensors, right click on the image on the Viewer Tab and select the [IO Sensor Filtering] option. This option enables the user to choose the level of image processing. Current level is indicated by a check mark.



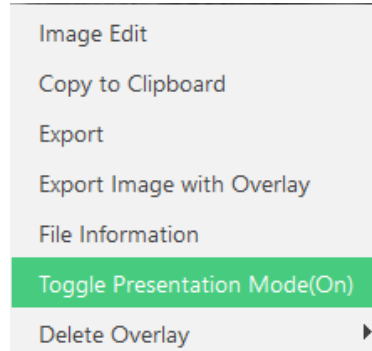
- IO Sensor Filtering supports other Rayence sensors except EzSensor and AnySensor.
- The level of image processing is displayed as set by the IO sensor driver. For the details, please contact the manufacturer of the IO sensor.



## 2.8 Presentation Mode

- Entering Presentation Mode

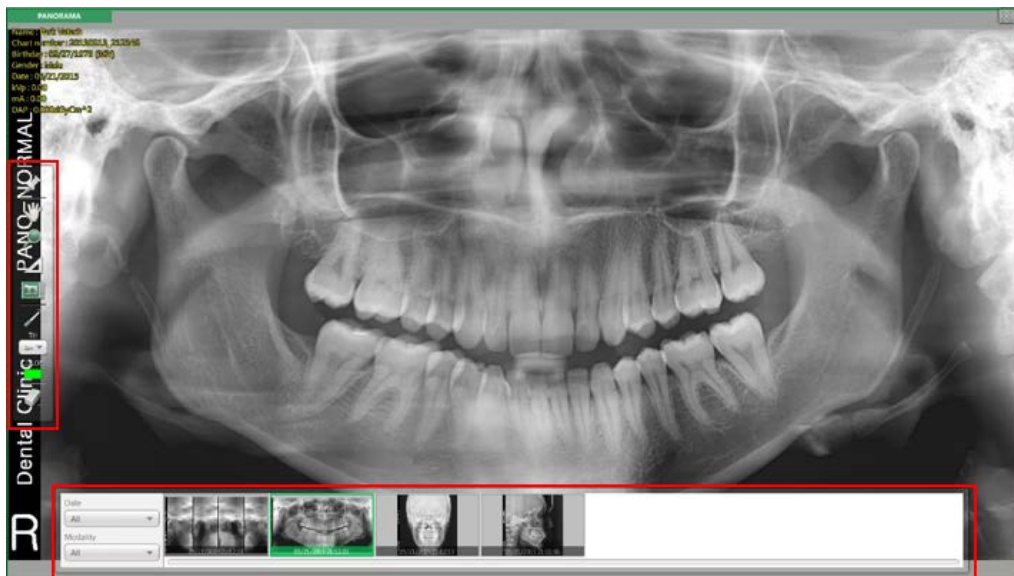
- Click the right button on workspace, and select the [Toggle Presentation Mode (On)] option. The shortcut key for this function is <Ctrl + Enter>.



- Double click the workspace. But, when other functions from tool bar other than Zooming and Panning are in use, the image cannot be viewed in Presentation Mode by double clicking the image.
- Double-click title bar of the image to change it to the maximum size in the View.

- Presentation Mode Tool Bar

When mouse is at the left side of screen or bottom side of screen, Tools or thumbnails of the slides/images are displayed.



- Presentation Mode Patient Information

The at the upper-right side, can be hidden. Right click then select the [Patient Information] on the list menu.

- Exiting Presentation Mode

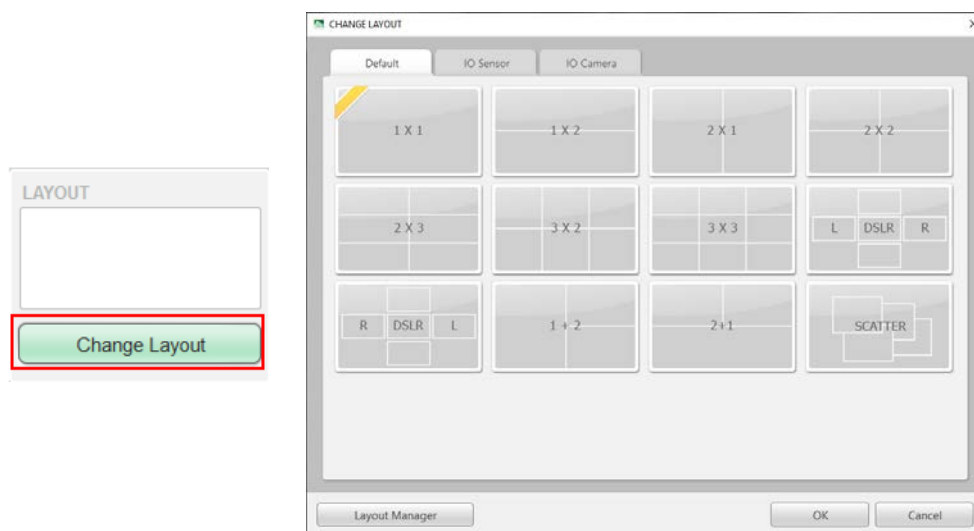
Click the [X] button on the top right corner of the image to close the presentation mode.

### 3. Changing Layout

Workspace can be split, choosing one of approximately 25 supported layouts. As a result, users can view more than 2 images on a screen. This feature is named Layout.

#### 3.1 Changing Layout

1. Click the [Change Layout] button. The [CHANGE LAYOUT] window appears.

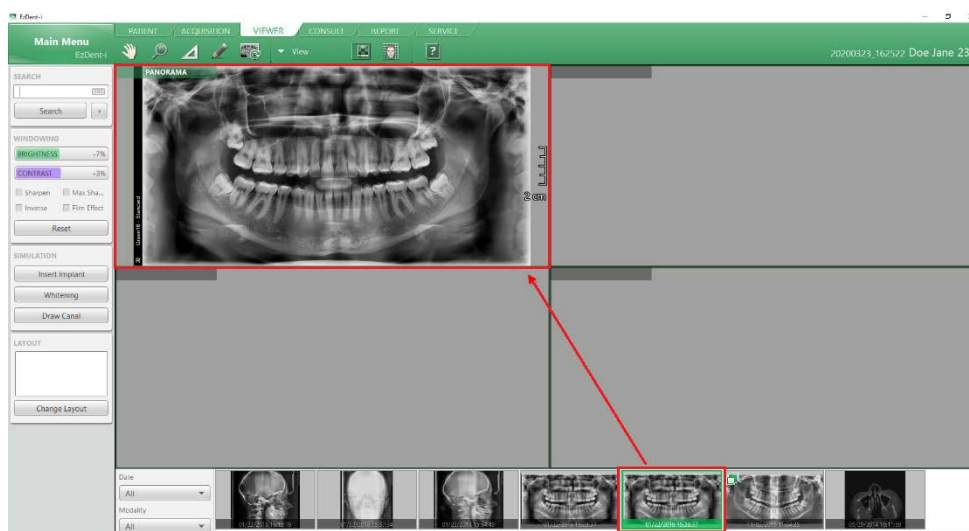


NOTE

If the [Change Layout] button does not appear, scroll the mouse or click the button for user to see the button on the menu list.



2. Double click the desired layout, or select then click the [OK] button. The selected layout appears on the workspace.
3. Drag and drop the thumbnail image in the image view screen.



- Applying multiple layouts

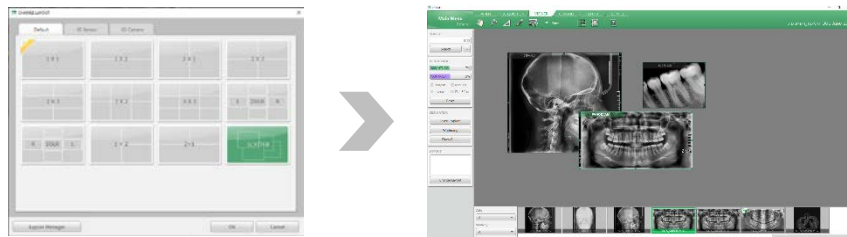
When searching for other patients while multiple layout is applied, the image is displayed at the first widget of the layout list.

- Layout View order

Horizontal > Vertical, Left > Right, Top > Bottom

- Applying SCATTER layout

Users can select the [Scatter] layout from the [CHANGE LAYOUT] window to position the images freely as desired. At this time, the patient information is not displayed on the screen. Right click the image to display the patient information.



When using the [Scatter] layout, place the mouse cursor on where the modality name is displayed and drag the images. If any opened image needs to be closed, mouse over the image and click the [X] button at top right of the image.

- Applying FMX layout

When there is more than one image in each View, click the [<] or [>] button to view the previous or the next image.

- Sending to Report while multiple layout is applied

If a [Send To Report] icon is clicked while multiple layout (including Bitewing layout) is applied or a certain image is displayed in full screen mode, the image is added to the report in Fit size and as viewed in the Viewer Tab.

## 3.2 Setting as Default Layout

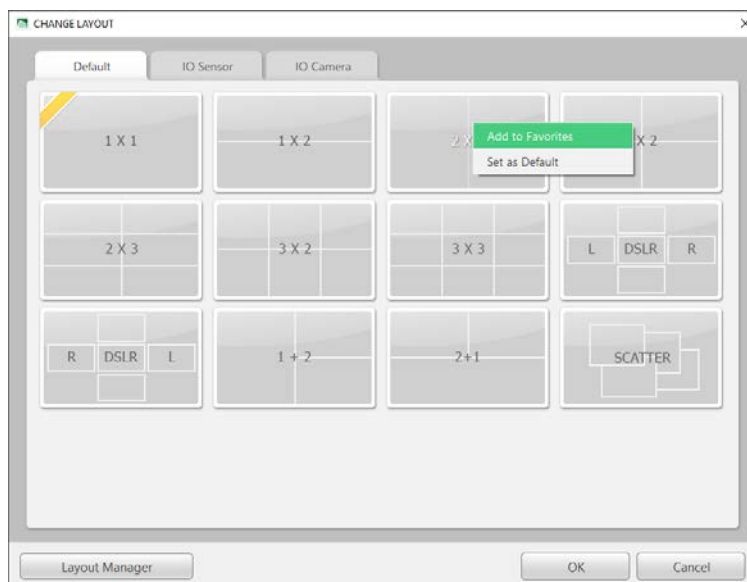
1. Click the [Change Layout] button. The [CHANGE LAYOUT] window appears.
2. Select the desired layout, and right click to select the [Set as Default] option.



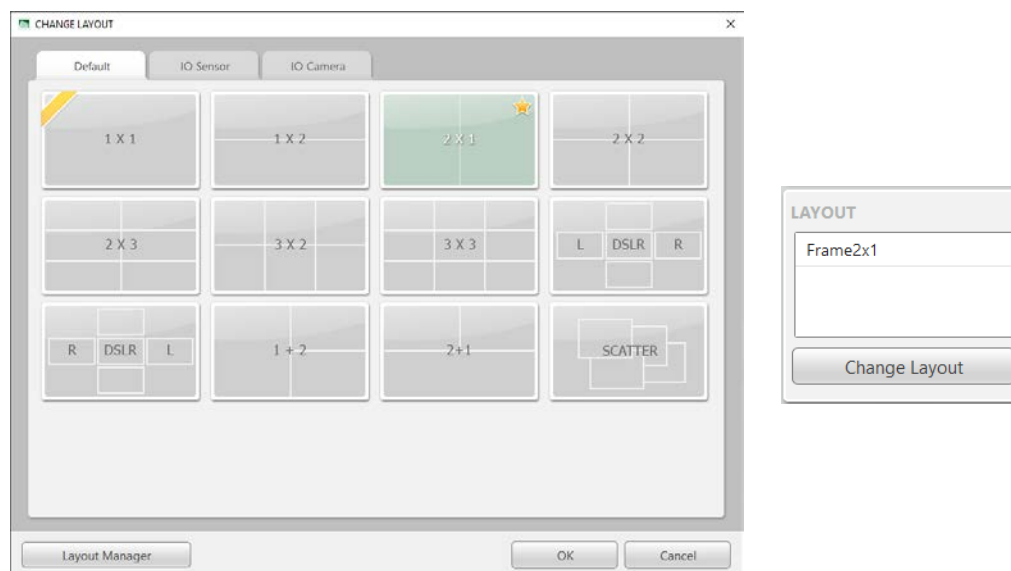
3. Click the [OK] button. The selected layout appears on the workspace.

### 3.3 Adding to Favorites

1. Click the [Change Layout] button, and the [CHANGE LAYOUT] window appears.
2. Click to select a layout, and right click on the layout and then click the [Add to Favorites] option.



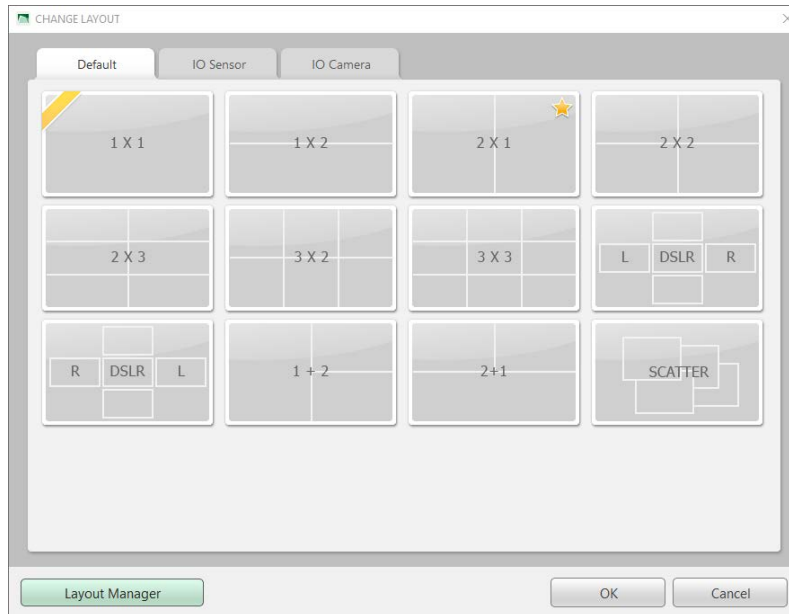
3. The star mark appears on the selected layout, and click the [OK] button. The selected layout is added to the layout list on the Control Panel.



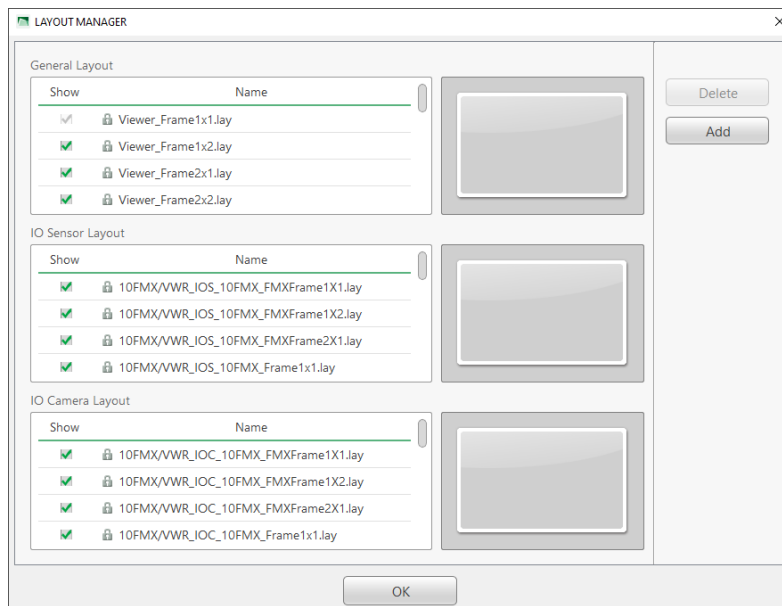
### 3.4 Layout Manager

The user can add new layouts or delete layouts as well as change the list shown in the [CHANGE LAYOUT] window by using the [Layout Manager] option.

- Show/Hide
  1. Click the [Change Layout] button, and the [CHANGE LAYOUT] window appears.
  2. Click the [Layout Manager] button at the bottom of window.



3. [LAYOUT MANAGER] window appears.

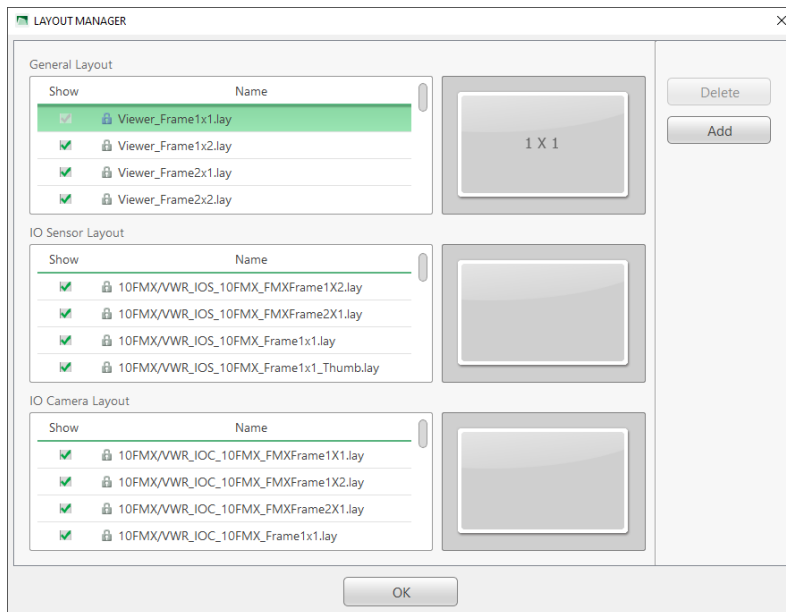


4. Check the [Show] option for layouts to be seen in the [CHANGE LAYOUT] window and Uncheck the [Show] option for layouts not to be seen in the Change Layout] window. Then, press the [OK] button.

- Add/ Delete layout

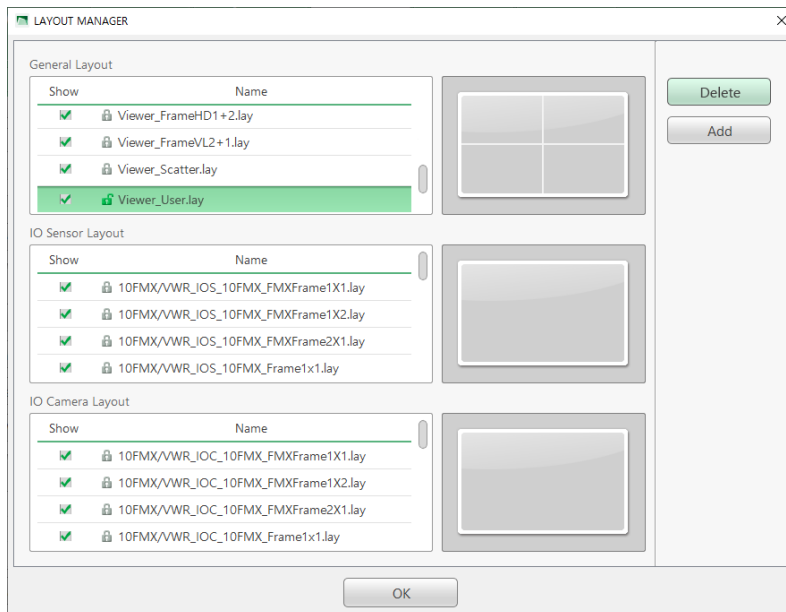
1. Add layout

Click the [Add] button to add downloaded layouts to the default layouts. But layouts should be downloaded in advance.



2. Delete layout

Click the [Delete] button to remove the selected layouts from the [CHANGE LAYOUT] window.

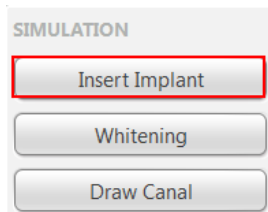


## 4. Simulating Implant

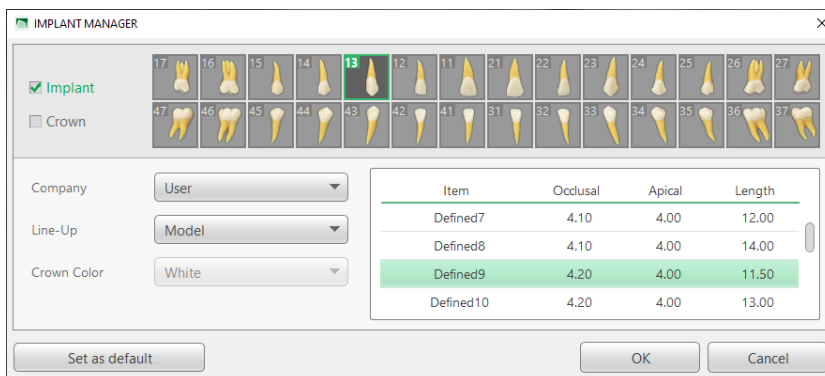
The implant simulation can be inserted in two different methods on EzDent-i. First, user can insert the implant and locate it at the correct position manually. Second, based on length information of image, implant is selected and located at the correct position automatically.

### 4.1 Implant Insert Option: Manual/Automatic

1. Click the [Implant Insert] button from the simulation items. The [IMPLANT MANAGER] window appears.



2. Select the information of the implant to be inserted from the [IMPLANT MANAGER] window. Select the implant location with the corresponding tooth number. Select the implant manufacturer from the company section and the model name of the implant from the line up section. Select the correct size of the implant in the right side.

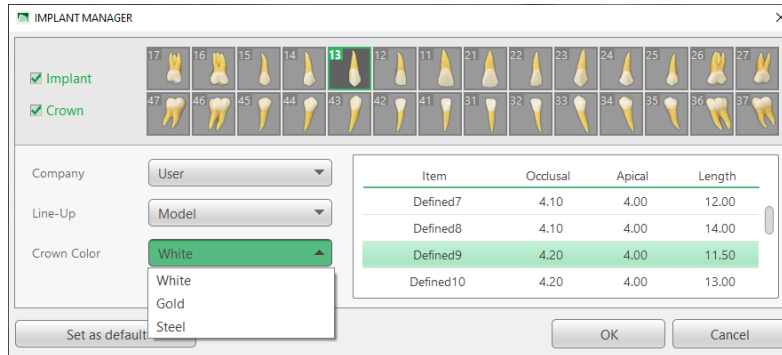


- Click the [Set as default] button to change the preset implant for each tooth number.
- If company, line up and STL are empty, check if implantDB.exe has been installed on the PC.

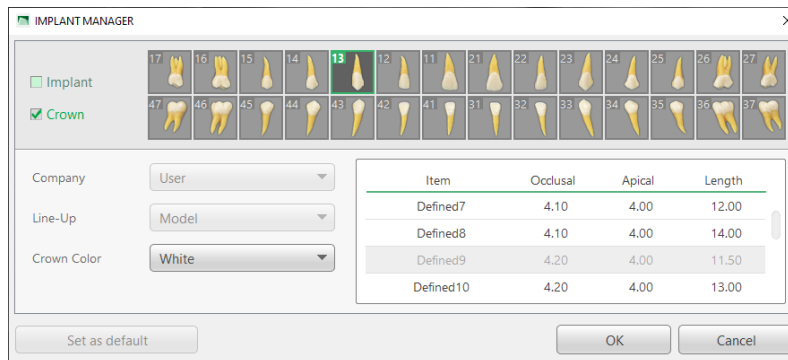


Based on the tooth number, specific implants (implant company, Line-Up, and Model Name, etc.) are set by default. The preset implant can be modified from [Main menu > Settings > Simulation > Preset Implant].

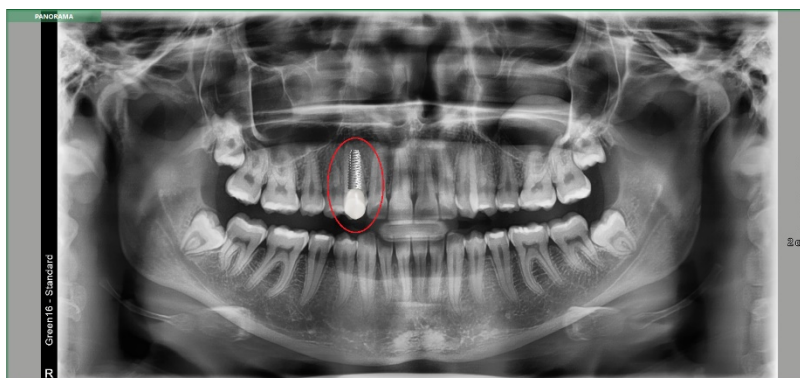
3. If needed, click the [Crown] check box to perform the crown placement during the implant simulation.
  - If the [Crown Simulation] option is marked checked, you can also set the color of the crown to white, gold, or steel.



- Only crown without implant simulation is possible by checking the [Crown], not the [Implant] option.



4. After the selection is done, click the [OK] button. The implant is placed in the designated location.



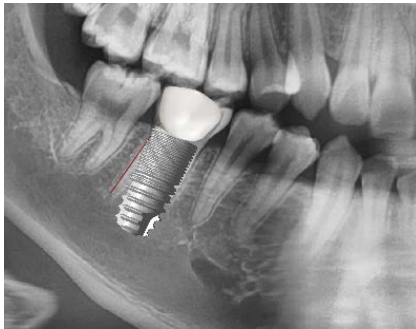
- Implant Automatic Insert: Implants are inserted at the specified location according to the selected tooth number.
- Implant Manual Insert: Implants are inserted at the user-selected location manually



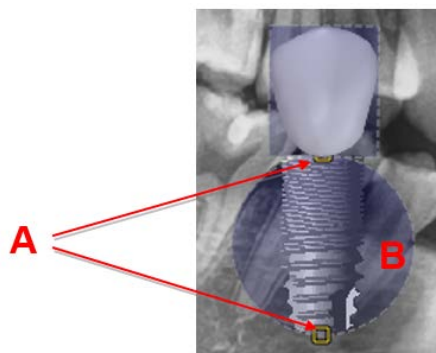
The Implant Insert method is set to Automatic by default. The method can be changed from [Settings > Simulation > Preset Implant].



- Place the implant in the desired location by adjusting the direction of the implant and the crown size.



The following is the way to change the direction and size of implant.



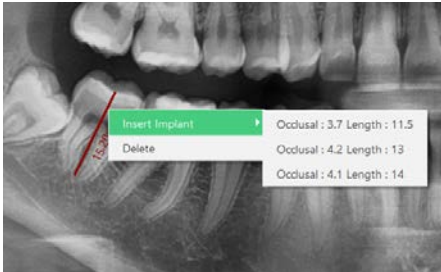
- When dragging the inner part of the purple circle, the position of the implant can be controlled.
- When dragging the small yellow box the direction of implant can be controlled.

## 4.2 Implant Insertion by Measuring Length

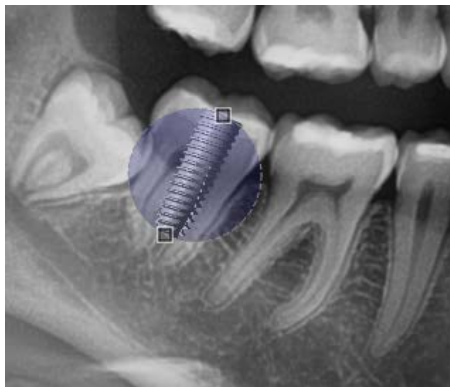
- Click the [Length] icon and click two points to measure the length. The line for the measurement appears on the image and click the [Length] icon again to deselect



2. Click the measured line and right click to see list menu. Select the [Insert Implant] option from the list menu.

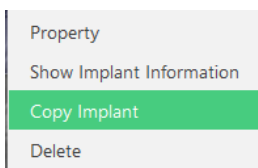


3. Three implant options are listed for the measured length. Click the desired implant option, and it will be inserted automatically.

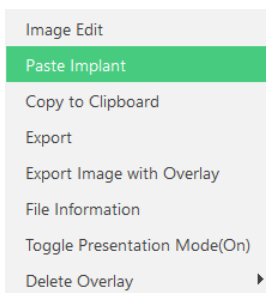


### 4.3 Copying and Pasting Inserted Implant

1. Right click on the simulated implant and select the [Copy Implant] option.

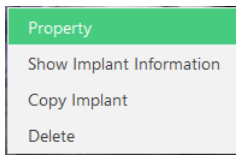


2. Right click on the desired location and select [Paste Implant] option. Then, the implant is inserted on the selected location.



## 4.4 Modifying Inserted Implant

1. Right click on the simulated implant and select the [Property] option.



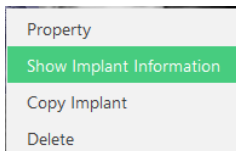
2. Modify the implant information as desired in the [IMPLANT MANAGER].

The implant properties such as Company, Line-Up, model, and Item can be modified, and the [Crown Simulation] option can be also selected.

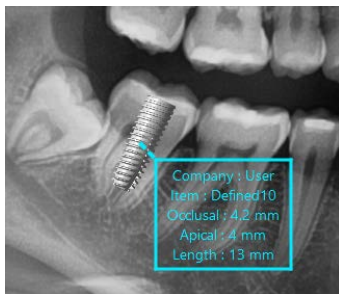
3. Click the [OK] button. Then, the modified implant appears.

## 4.5 Inserted Implant Information

1. Right click on the simulated implant and select the [Show Implant Information] option.



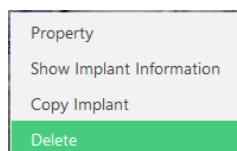
2. The implant information will be shown.



- Right click on the implant once again and select the [Hide Implant Information] option to hide the implant information.
- When you move the implant image, the information will move along with the image.

## 4.6 Deleting Inserted Implant

Right click on the implant and select the [Delete] option to remove the placed implant.



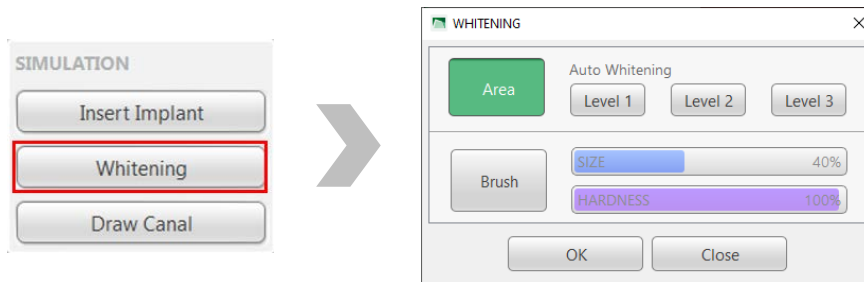
CAUTION

When using the [Initialize] icon on the toolbar, all previous [Free Draw] items including the inserted implant will be deleted.

## 5. Simulating Tooth Whitening

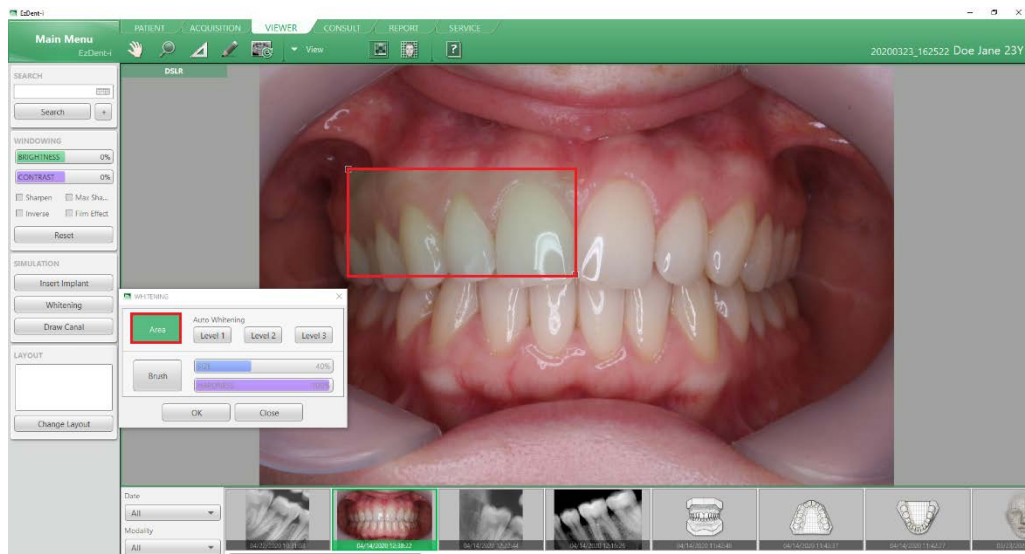
The whitening procedure can be simulated for teeth with heavy stains, from nicotine, for example. In order to use this feature, an intraoral tooth image as DSLR type must be running on the workspace.

For Simulating tooth whitening, there are two methods: The [Area] type and the [Brush] type. To begin, click the [Whitening] button. The [WHITENING] window appears.



### 5.1 Tooth Whitening with Area Function

1. Select the [Area] button and locate the box on the area to apply whitening. The size of the box can be adjusted freely.



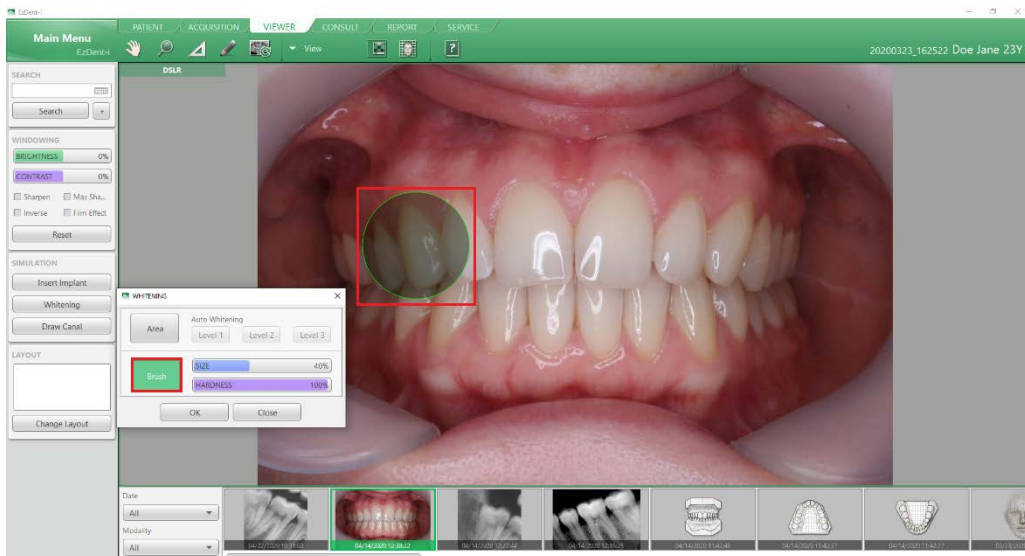
2. Choose [Level 1], [Level 2], or [Level 3] depending on the intensity of the desired whitening effect.
3. By clicking the [OK] button, the applied effect is saved in DB.

## 5.2 Tooth Whitening with Brush Function

1. Click the [Brush] button in the [WHITENING] window. The slider for the [Size] and the [Hardness] options is activated.



2. Move the slider to the left and right to adjust the size and strength of the whitening brush.
3. Click and drag the mouse over the area to apply whitening effect. Teeth appear whiter.



4. Click [OK] button to save the change.

## 6. Drawing Nerve Canal

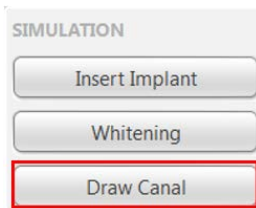
Prior to the implant simulation, the patient's mandibular nerve canal is usually referenced during the implant placement.

1. Calibrate the image prior to the mandible nerve canal simulation.



The image calibration method is discussed in Section 6.

2. Click the [Draw Canal] button. The shape of the mouse cursor changes to a cross.



3. Click to plot points along the mandibular nerve. To delete the previously plotted point, right click.

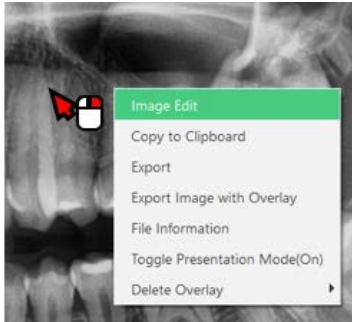


4. Double click to mark the end of the canal.

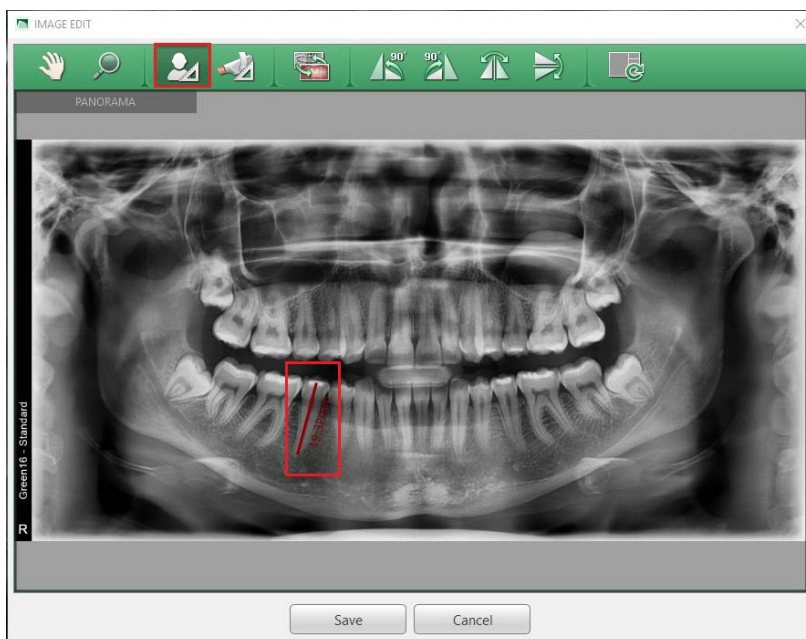
## 7. Calibration

A different measuring ratio is employed for different images and the exact length of an image is hard to measure. The image calibration allows the user to enter the exact length manually.

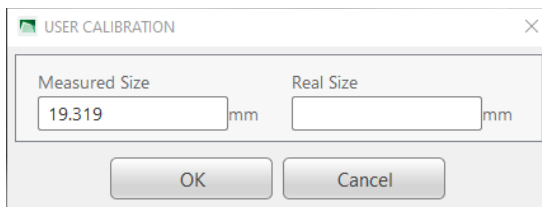
1. Right click on the workspace and select the [Image Edit] option.



2. On the [IMAGE EDIT] window, select the [User Calibration] icon from the toolbar. And then draw a line using [User Calibration] tool. Click the [User Calibration] icon once again to deselect.



3. Enter the actual length of the tooth and then click the [OK] button.



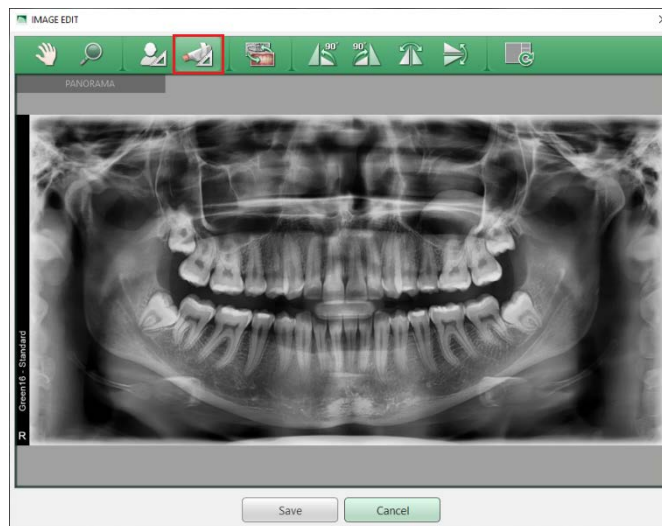
- After calibration, the scale appears at the right side of image. You can check whether the image has been calibrated.



After the calibration, the length is measured by the newly calibrated [Length] tool.

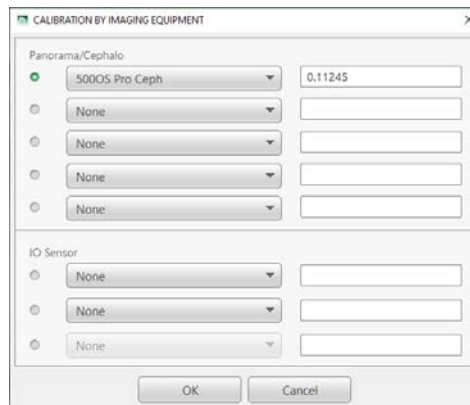
User can input the Calibration value easily using the Calibration Preset list provided through [Calibration by Imaging Equipment] function.

- Click the [Calibration by Imaging Equipment] icon in the [IMAGE EDIT] window. The [CALIBRATION BY IMAGING EQUIPMENT] window appears.



NOTE

- Set the Calibration value in the [CALIBRATION BY IMAGING EQUIPMENT] window. The set value is saved in the Client.

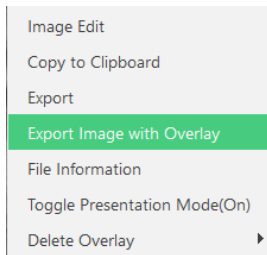




## 8. Exporting Image with Overlay

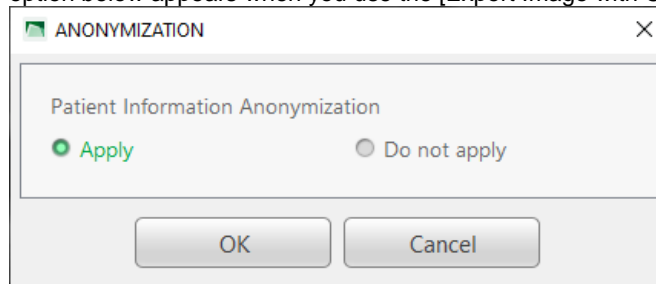
You can export an image with overlay. The applicable functions are windowing, filter, overlay, and ruler.

1. Select an image with overlay.
2. Right-click on the image, and a context menu will appear. Click [Export Image with Overlay].



### ■ Patient Information Anonymization

If you have chosen to use the Privacy Policy Settings (found in [Settings > Others]), and [Export] is one of the options chosen under [Anonymize Patient Information], the option below appears when you use the [Export Image with Overlay] function.



If you choose [Apply], the patient information will be anonymized in the resulting file.

3. Refer to 'Chapter 3. EzDent-i Basics' for subsequent steps.

## 9. Insight Navi

Insight Navi shows multiple frames of a panorama image moving towards Anterior/Posterior direction

### 9.1 Insight Toolbar



[Insight] toolbar on the Viewer tab is activated if the image has multi-frame images

1. Insight Navi  
: Click the [Implant Insert] button from the simulation items. The [IMPLANT MANAGER] window appears.
2. Show/Hide Popup  
: Show or hide popup images from the Insight Navi
3. Capture All Popup  
: Capture all popup images individually.  
: The popup images will be saved in the order of popup creation and each image includes its frame number. With the [Capture All Popup] button, images except popup images will be not captured.

### 9.2 Starting Insight Navi

If the panorama image supports Insight Navi function, Insight icon is shown on the thumbnails.



Insight icon is activated only when the image includes multi-frame DICOM data.

1. Double click the image with Insight icon to present the image on the Viewer.

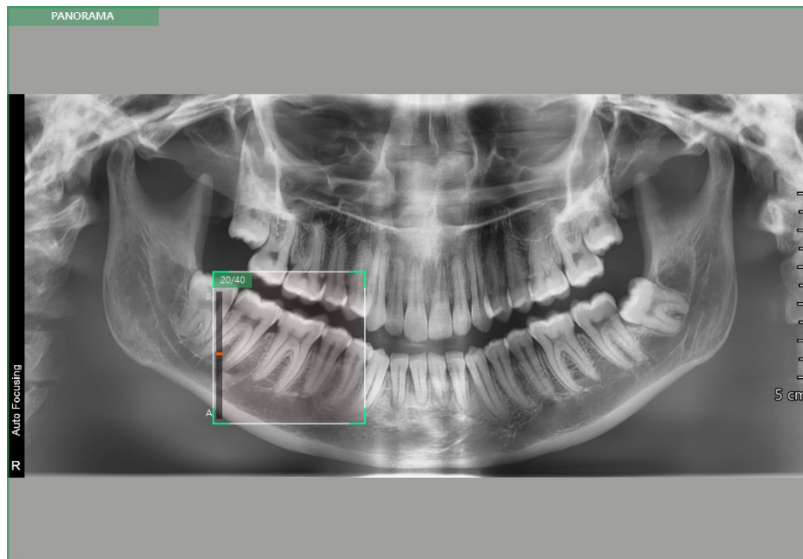
Panorama



2. Click the [Insight Navi] button to activate the Insight Navi function.

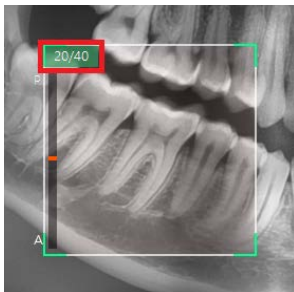


3. A square navigator will be shown where the mouse cursor is on the screen.



### 9.3 Insight Navi Configuration

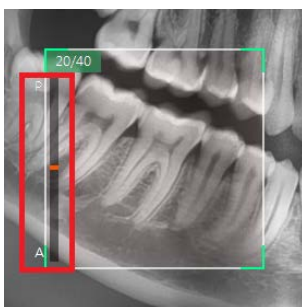
1. Frame Number



The frame number, for example, 20/40 indicates current frame/total frame.

If a panorama image includes 40 multi-frames in the image, the default frame shown in the navigator at the first time is frame #20 which is the median value.

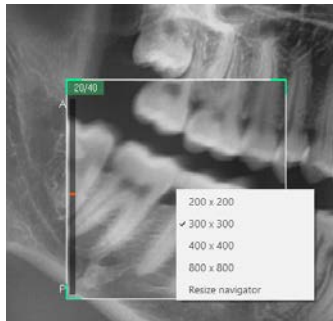
2. Position Indicator



The position indicator with is a slice bar on the left side of the navigator indicates current frame visually based on Posterior/ Anterior direction. But the slice bar cannot control the frame.

3. Change the size of navigator

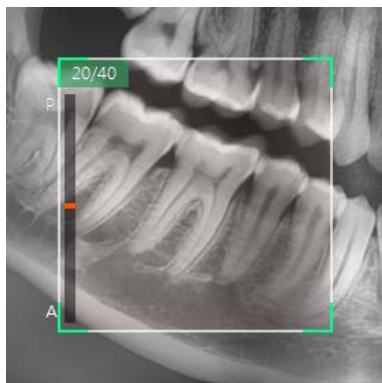
Right click inside the navigator to change the size of the navigator.



The default value of navigator size can be set at [Settings > Viewer > Tool > Insight] in the Main Menu

## 9.4 Insight Navi Function

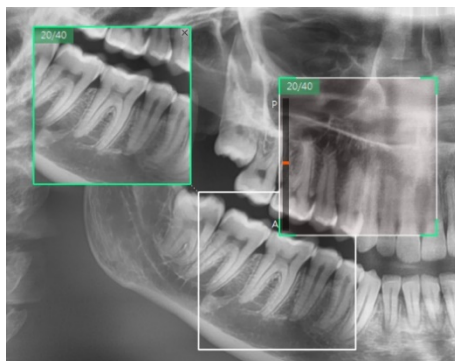
1. Changing frame number



- Mouse wheel scroll up: Anterior direction
- Mouse wheel scroll down: Posterior direction

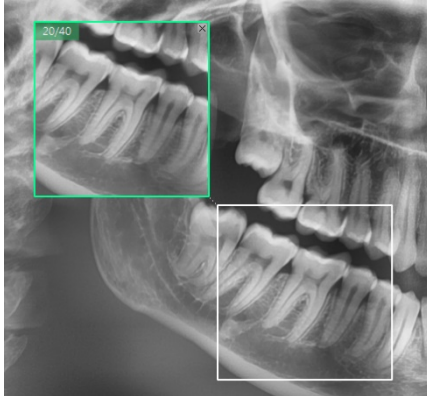
2. Moving Insight Navi

The navigator is created where the mouse pointer is on the image. As the mouse pointer moves, the navigator tags alone.



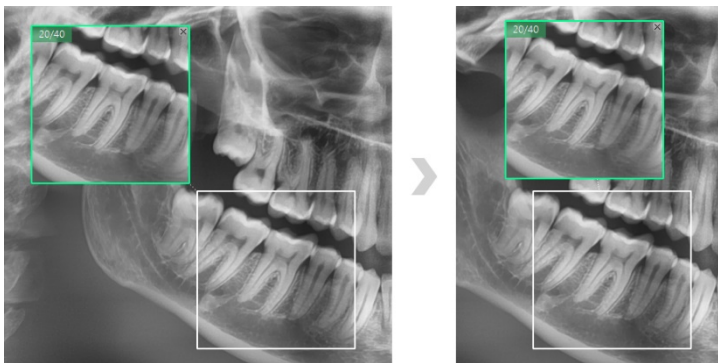
### 3. Frame image pop-up

Click the current frame to create a pop-up image in a different window.



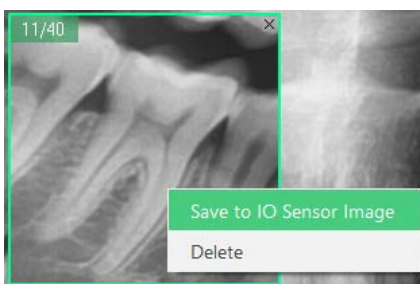
### 4. Moving pop-up image

The pop-up image can be moved by dragging and dropping the image.

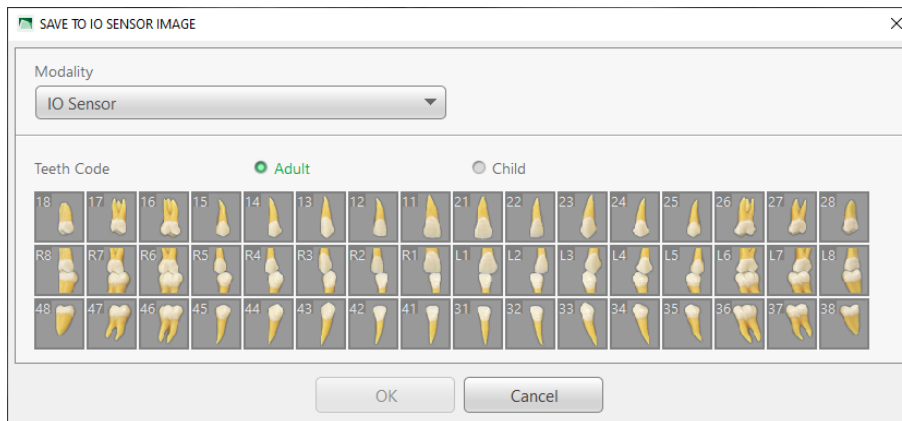


## 9.5 Saving as IO Sensor Image

1. Create a pop-up image by implementing Insight NAVI.
2. Right-click the image and then select [Save as IO Sensor Image] from the context menu.



- The [Save to IO Sensor Image] window appears as below. Select a modality, teech code, and teeth number to which the pop-up image is saved.

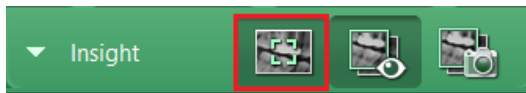


If you select 'Captured Image' as modality, the teeth code field is not activated.

- After selecting them, click the [Save] button, and the pop-up image will be saved to the corresponding tooth number.

## 9.6 Exiting Insight Navi

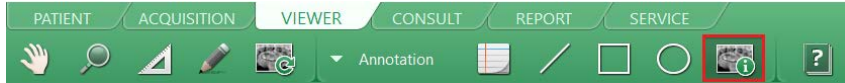
Click the [Insight Navi] button to deactivate the Insight Navi function.



## 10. Image Information

### 10.1 Adding Image Information

1. Click the [Image Information] button on the [Annotation] tool bar.



2. The corresponding information is displayed on the top left corner. Users can move the information to desired position. Users can set the color and the size of font on [Settings] – [Viewer] – [Annotation].



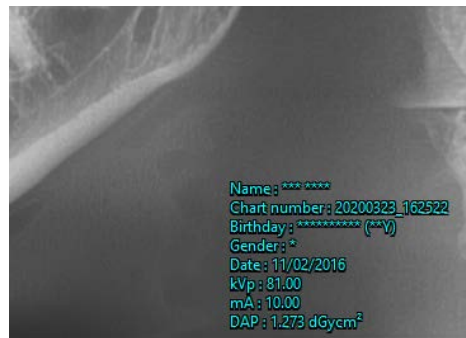
3. To hide the image information, click the [Image Information] button again or right-click on the image information then click [hide] button from the context menu.



Information items are identical to information provided in presentation mode.  
: Name, Chart Number, Birthday, Gender, Date, KVp, mA, DAP






- Anonymization Information Displayed on Screen

If you have chosen to use the Privacy Policy Settings (found in [Settings > Others]), the patient information displayed on the PATIENT tab will be marked with asterisks (\*).





















## 11. Tools



### 11.1 Main Tools

Icons	Designation	Description of Features
	Panning	Move the image freely.
	Zoom	Zoom in and out of the image.
	Length	Measure the distance between the two points.
	Free draw	Draw freely.
	Reset View	Initialize Move, Zoom



## 11.2 Advanced Tools

Classification	Icons	Designation	Description of Features
View		Magnifier	Magnify and apply contrast at the selected region.
		Turn On/Off Grid	Display grid on the image to check the asymmetry of patients.
Insight		Insight Navi	Shows multiple frames of selected region
		Show/Hide Popup	Show or hide popup images.
		Capture All Popup	Capture all popup images individually
Measurement		Multi length	Measure lengths between more than 2 desired points.
		Angle	Measure angle between desired points.
		Profile	Measure bone density of the desired region.
Annotation		Memo	Leave a memo at the desired point.
		Line	Drag a mouse to draw a line at the desired region.
		Rectangle	Drag a mouse to draw a rectangle at the desired region.
		Ellipse	Drag a mouse to draw an ellipse at the desired region.
		Image Information	Insert image information at a desired position.
Capture		Region Capture	Capture the current image. The captured image is saved to DB.
		Selected Window Capture	Capture the image of selected region. The captured image is saved to DB.
		Capture Viewframe	Capture the workspace and save it to DB.
		Send To Report	The workspace image is directly sent to Report.
ETC		Export	Export selected patient images.

Classification	Icons	Designation	Description of Features
		Turn On/Off Overlay	Show/ Hide all displayed objects.
		Reset All	Delete the all applied tool effect. The initialized image is saved to DB.



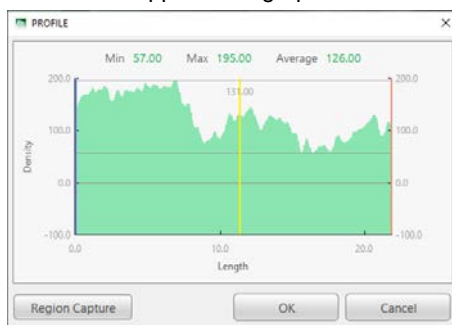
Users can not use [Magnifier] function when image window size is smaller than magnifier. To make the image window larger or smaller, go to [Settings > Viewer > General > TOOL > Magnify & Enhance View Size].



Press the <Esc> key on the keyboard to cancel and close the corresponding function while inserting Overlay.



The [Profile] tool displays the gray shade values of the selected line with 256 colors from 0 to 255. The User can predict the hardness of bones. After selecting the tool, draw the line at the desired point. The gray shade values on the line drawn area appear in a graph format.



- When using [Capture Viewframe], the captured image including applied layout or FMX will be acquired.
- The capturing area can be set according to the mouse movement if the [Selected Window Capture] button is clicked while two or more images are displayed in the multiple layouts.



The spacing, line color, line thickness, and the line opacity of grid can be set in the [Settings > Viewer > General > Grid] menu.

## Chapter 7. CONSULT Tab

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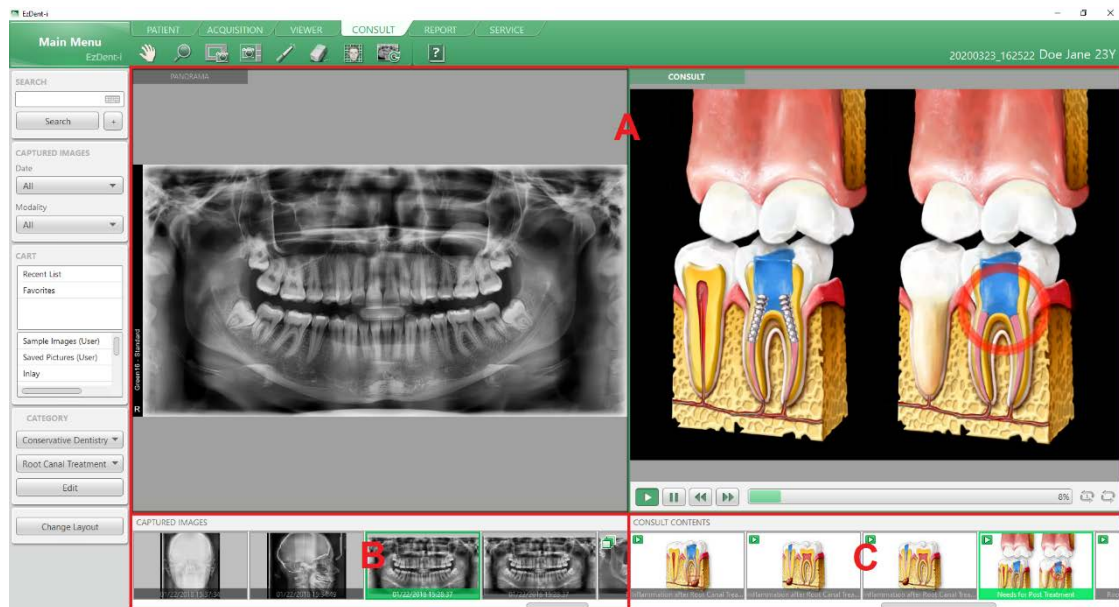


# 1. Configuring CONSULT Tab

The Consult tab provides the necessary contents when consulting patients, and also the user can manage the contents with different categories.

EzDent-i offers features for users to add to cart, or edit or delete the consult contents.

## 1.1 Workspace



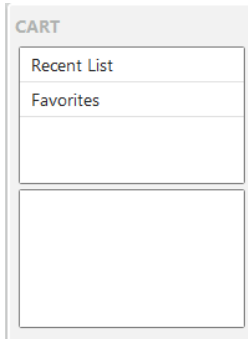
- A: The consult contents are displayed or played on this pane. The user can drag and drop the necessary contents from the B pane.
- B: This pane shows the images for the selected patients in thumbnail.
- C: The consult contents are displayed in this pane. It shows the animated contents or image list for consulting patients.



If the operating system of user's PC is Windows 7 Edition and Media Player has not installed yet, video for consultation does not play. Visit <http://windows.microsoft.com> and download Media Player 12 and install it.

## 2. The Use of Cart

EzDent-i provides basic 20 consult contents. Also, user can use about 200 consult contents related to implant, periodontal disease, etc. that EzDent-i provides with fee.



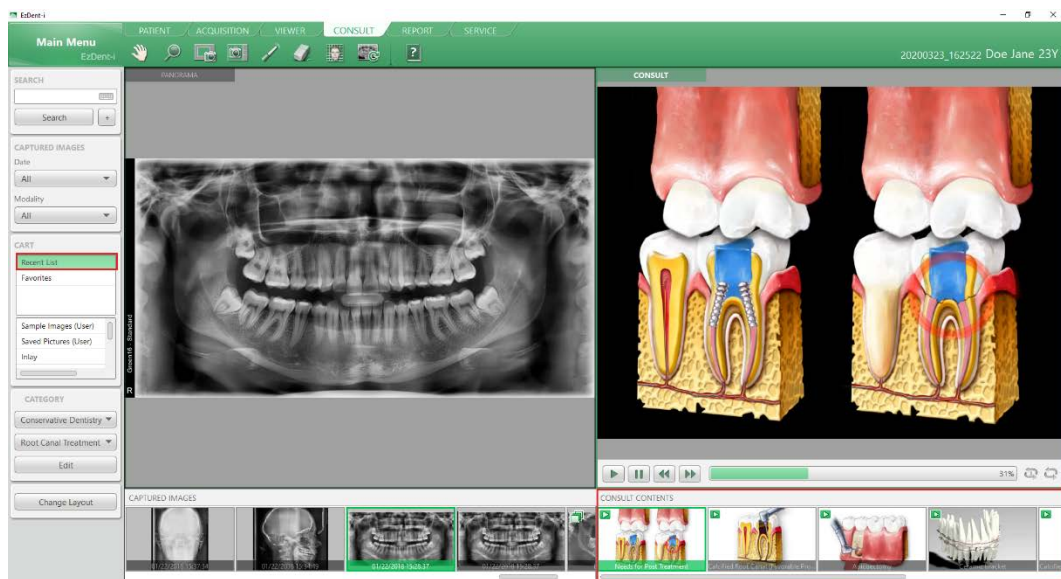
To activate the 200 Consultation animations, users can contact a customer support center of VATECH.

### 2.1 Favorite

The Favorites Cart contains the consultation animations added by the user. The user's favorites and often used consultation animations can be added to this cart.

### 2.2 Recent List

The most recently used 20 consultation animations are contained to A Recent List Cart.

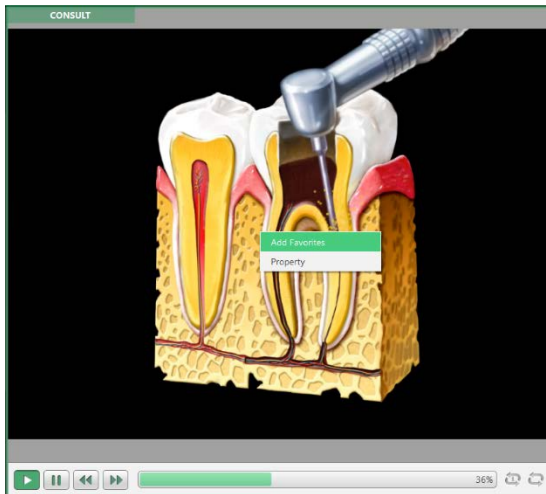


## 3. Editing Cart

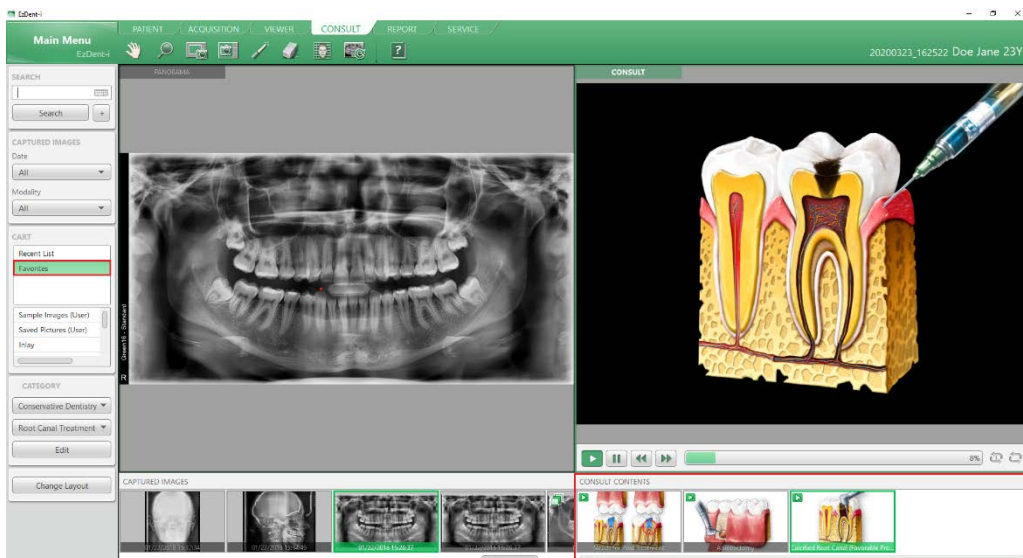
### 3.1 Adding Consultation Animations to Favorite Cart

To add the desired Consultation animations to Favorites follow the steps below.

1. Right click on the Consultation animations and the list menu appears. Select the [Add Favorites] from the list menu. Completion window will appear.

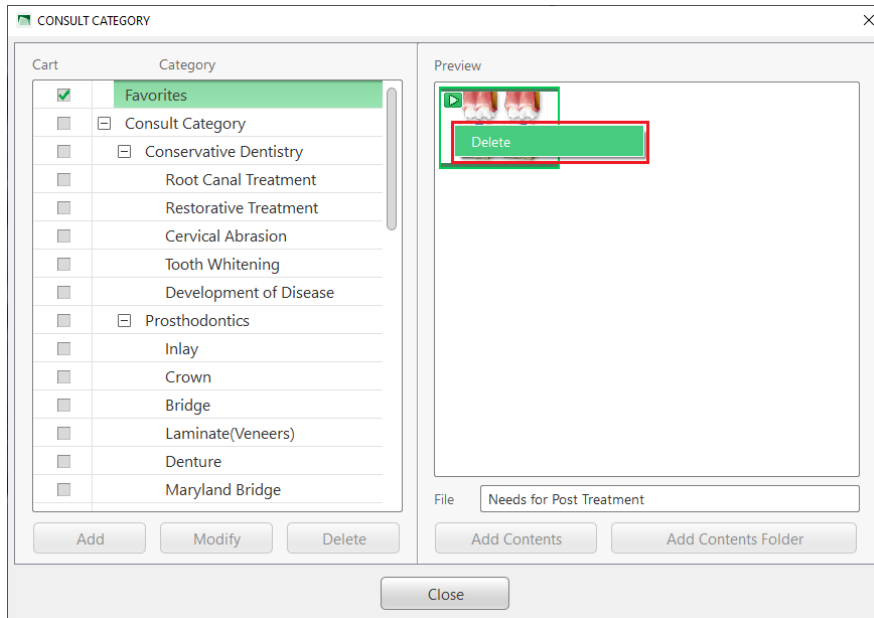


2. When user selects the [Favorites] Cart from the Cart menu, the Consultation animations added in Favorite are displayed in the Thumbnails as shown below.



### 3.2 Deleting Added Consultation Animations from Favorites Cart

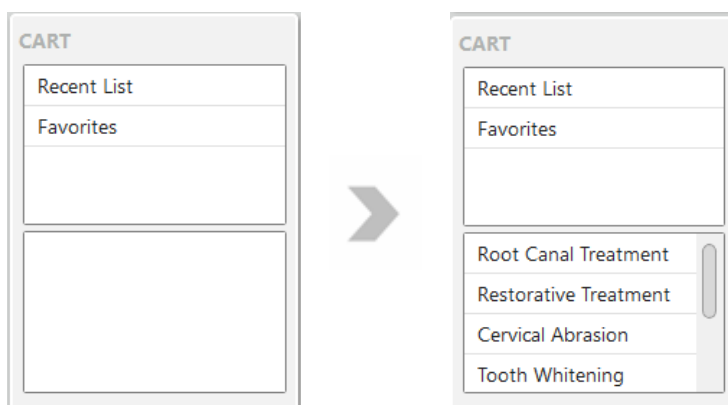
1. Select the [Edit] button. The [CONSULT CATEGORY] window appears.
2. Select the [Favorite] Category from Category list. Then, the consultation animations added to Favorite are displayed on the right.
3. Select a desired consultation animations by right clicking, then, list menu appears.



4. Click the [Delete] option and a window appears to confirm the deletion of the selected animation.

### 3.3 Adding the Frequently Used Category

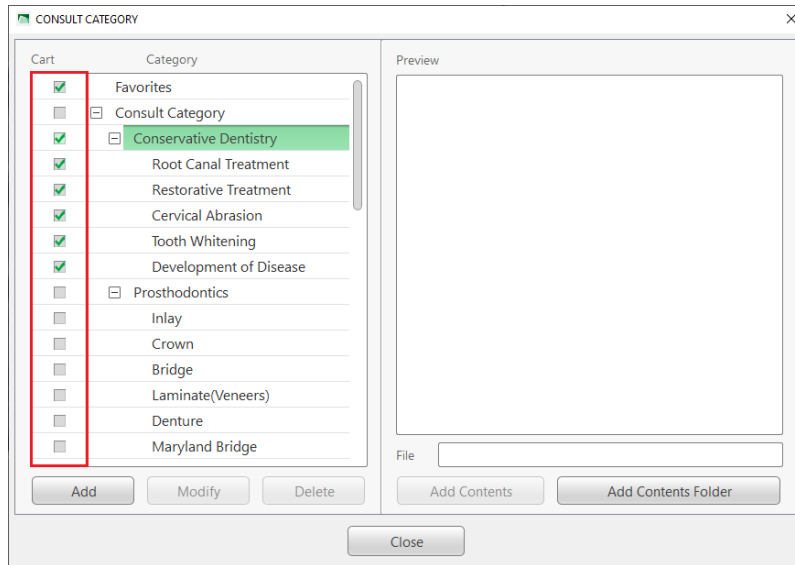
The frequently used Category can be displayed without being added to a particular Cart as shown below.



1. Click the [Edit] button. The [CONSULT CATEGORY] window appears.



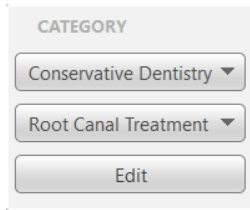
2. Select the desired category on the check box to add to frequently used Category. Then, click the [Close] button.



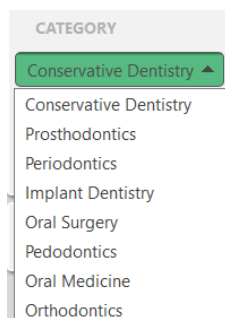
3. The selected Categories are displayed.

## 4. Searching and Playing Consultation Animations

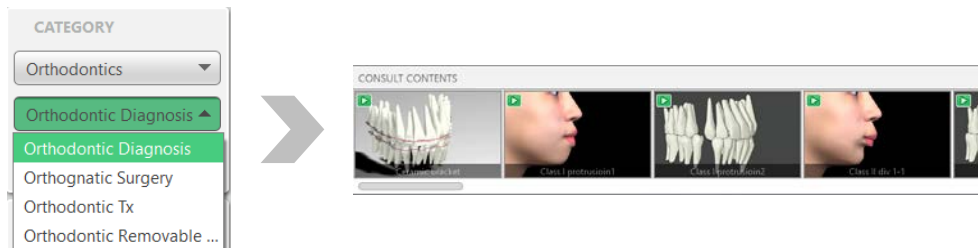
To search and open desired consultation animations, users can select from a list.



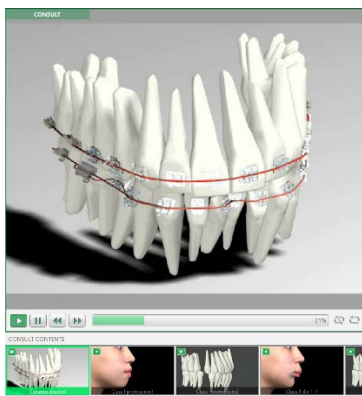
1. Click the first list located in CATEGORY. According to treatment subject, Categories are classified. If user wants to verify orthodontics, select [Orthodontics] from the first list.



2. Based on the first selection, the classified categories in detail are listed on the second list. For example, 3 categories are contained in the [Orthodontics] tab. When user selects a category on the second list, Consultation animations that are contained in the second selection are displayed in the thumbnail filmstrip.



3. Select and drag and drop one of the displayed consultation animations from the thumbnail filmstrip to the workspace in order to play.



4. By selecting the button below, user can play, pause, fast forward and rewind the selected Consultation animations, and repeat all consult contents or repeat the current one.



NOTE

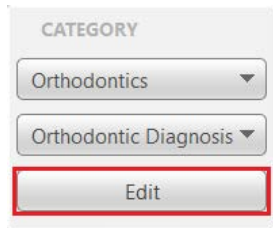
If the operating system of the PC installed for EzDent-i is Windows Vista, Consultation animations will not work normally.

## 5. Managing Categories

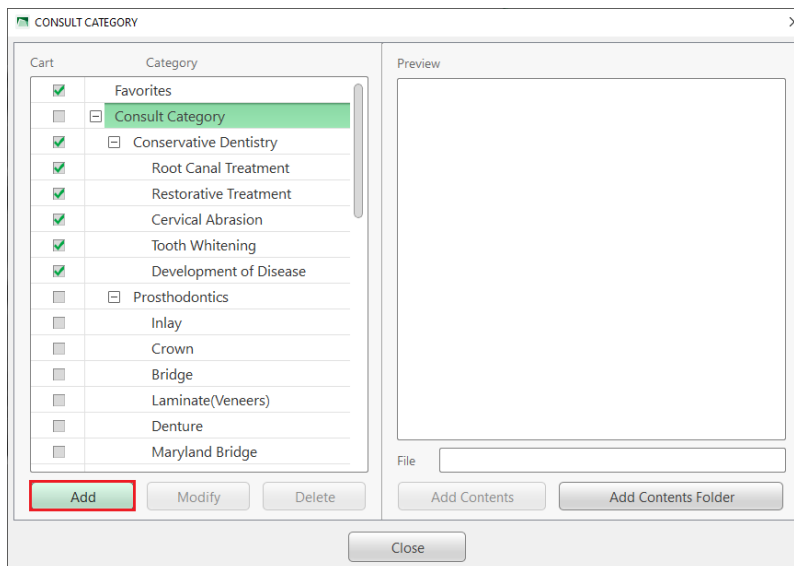
### 5.1 Adding User Category

From the category, the user can add a new category, or modify or delete the added categories. Also new contents or folders can be added to the categories.

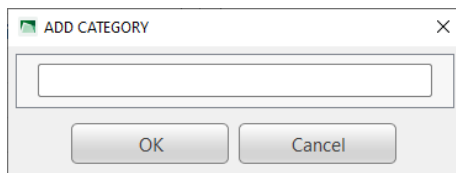
1. Click the [Edit] button. The [CONSULT CATEGORY] window appears.



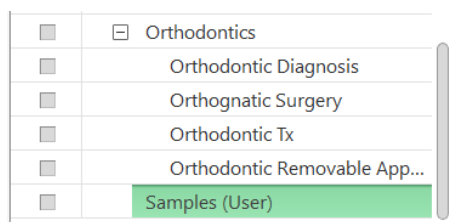
2. Click the [Add] button from the parent category to add a subcategory, which is marked with (-) mark. The [ADD CATEGORY] window appears. But the categories which have the mark, (-) can have a new category added under them.



3. Enter the category name in the input field and click [OK] button.

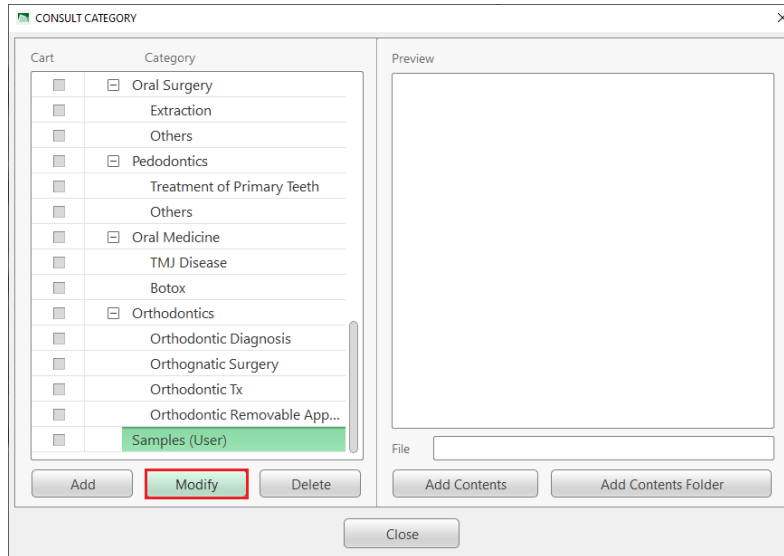


4. New Category is created and added under the selected category

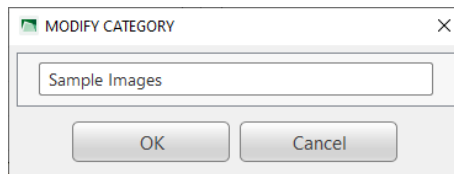


## 5.2 Modifying Category Name

1. Click the [Edit] button. The [CONSULT CATEGORY] window appears.
2. Select the category to change and click the [Modify] button.



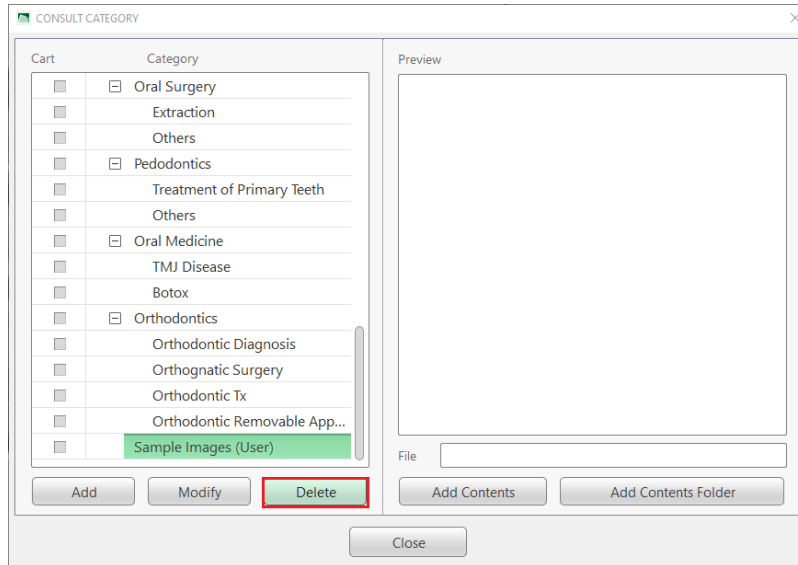
3. Enter a new name of the category as desired in the [MODIFY CATEGORY] window.



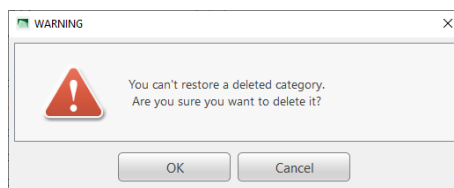
4. Click the [OK] button and a window appears stating the new category name has been added successfully. Changing the category name is complete.

## 5.3 Deleting Category

1. Click the [Edit] button. The [CONSULT CATEGORY] window appears.
2. Select the category to delete and click the [Delete] button.



3. The window appears to confirm the deletion of the selected category. Click the [OK] button to proceed with the deletion.

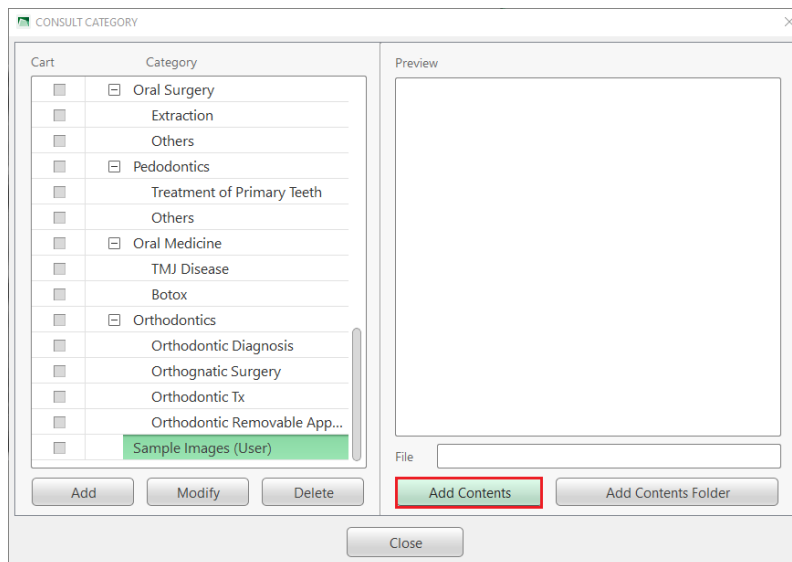


When the existing Category is deleted, the contents saved in that Category will be deleted.

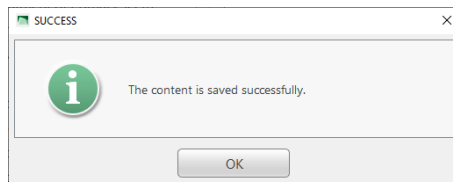
## 5.4 Adding Consultation Contents to Category

The user can add the images or animated contents (jpg, bmp, png, avi, wmv) or the document type of contents (doc, docx, ppt, pptx, pdf) that are saved in the PC to the category. Users can manage all the contents for Consulting with the patient in EzDent-i.

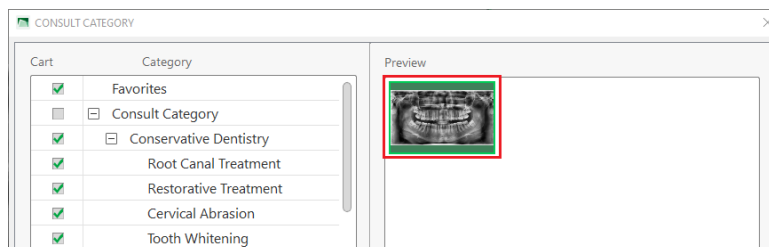
1. Click the [Edit] button. The [CONSULT CATEGORY] window appears.
2. Select the category to add a new content and click the [Add Content] button.



3. Select the desired files from the [Select a Content] window, and click the [Open] button.
4. Selected images are saved to the category selected first. If the images are properly saved at the category, completion window will be displayed.

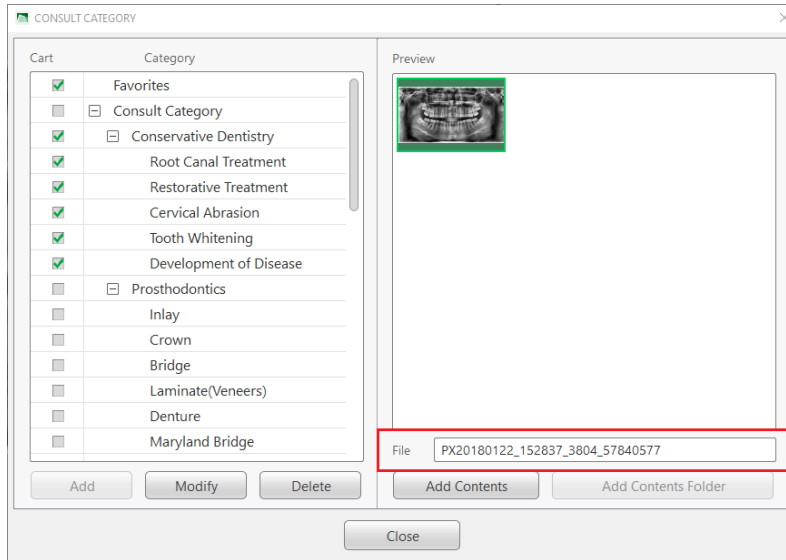


5. The added contents are displayed in the Preview pane.



If user wants to select more than 2 images, hold the Ctrl key on the keyboard and click the desired contents.

- Enter the name of the contents in the [File] field.

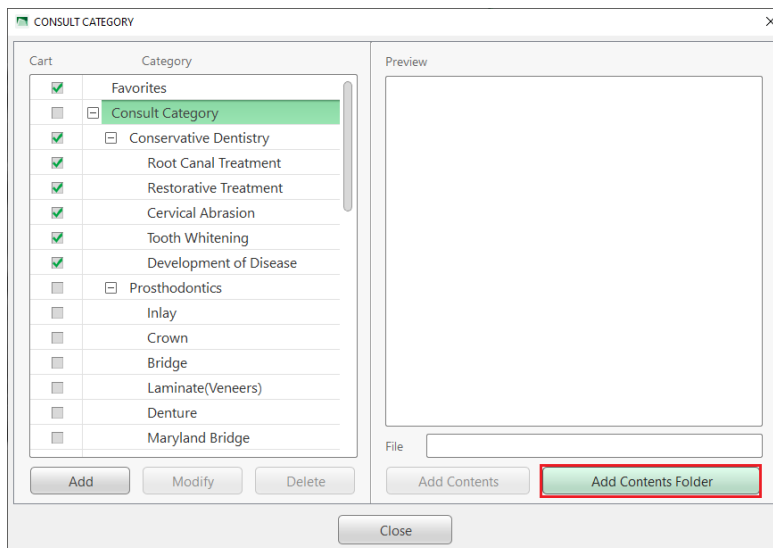


- Click the [Close] button

## 5.5 Adding Consultation Animations by Folder

The image folder in the local PC can be added to a user's consultation contents. In this case, the images in a folder can be added together in a single category.

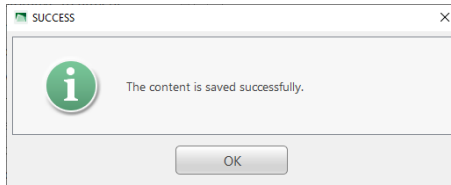
- Click the [Edit] button. The [CONSULT CATEGORY] window appears.
- Select a parent category, to which the contents folder will be added, and click the [Add Contents Folder].



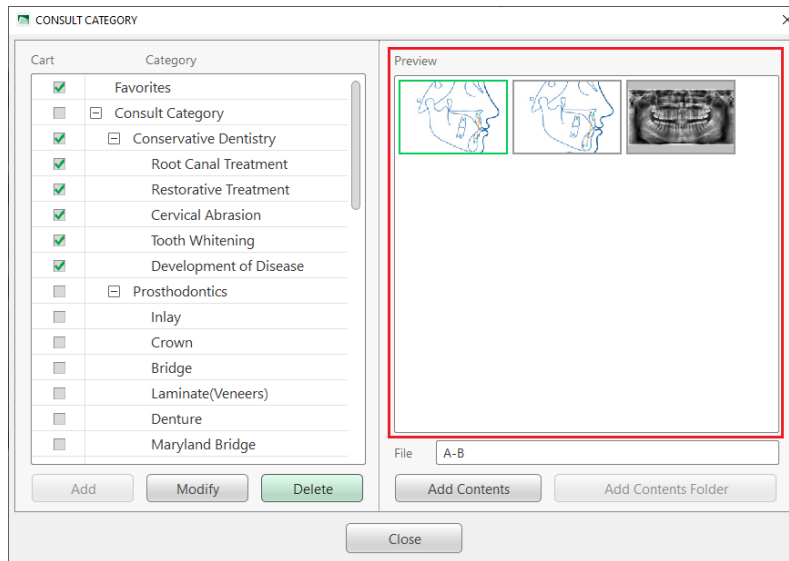
- Select the folder to add from the [Select Directory] window. Click the [Select Folder] button.



- The completion window appears. Click the [OK] button.



- The folder is added to the selected category as a sub category. The contents that are saved in the folder will appear in the preview pane.

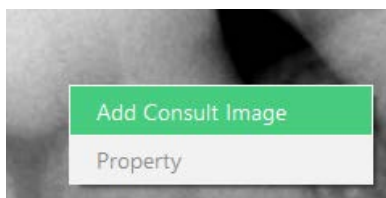


- Changing the name of the folder  
Double click the folder in the Directory window to change the name of the folder.

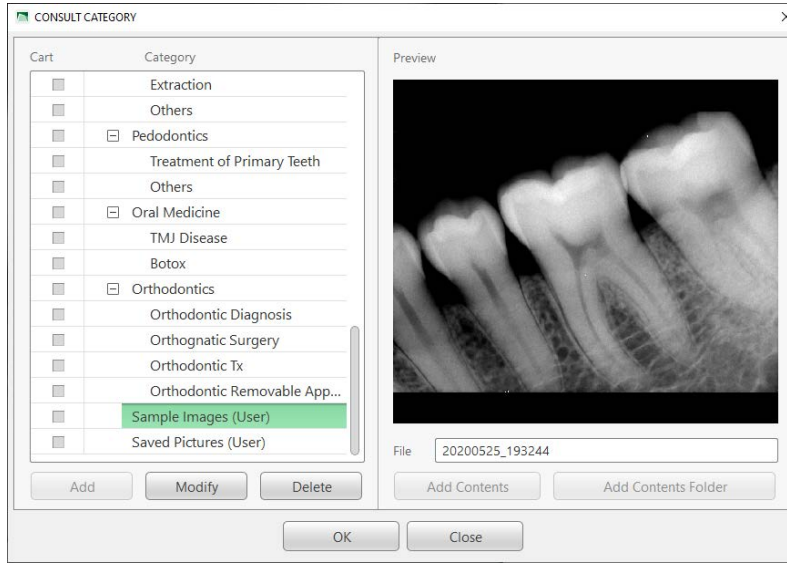
## 5.6 Adding Consultation Images

Users can add consulting contents to a category.

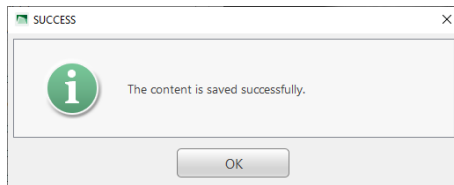
- Right clicks on the image in the Captured image pane and select the [Add Consult Image] option. The [CONSULT CATEGORY] window appears.



2. Select the category where to add the consulting contents. Consulting contents to add will be shown in the [Preview] area.



3. Click the [OK] button, and the content will be saved. If the image is properly saved, a completion notice window will be displayed.



## 6. Changing Layout









Users can split the workspace to display more than 2 images or Consultation animations at once. The way to split workspace is called Layout. EzDent-i provides 9 options for its Layout.



For detailed information related with changing Layout, refer to 'Chapter 6. VIEWER Tab > 2. Changing Layout'.

## 7. Tools

### 7.1 Main Tools

Icons	Designation	Description of Features
	Panning	Move the image freely
	Zoom	Zoom in or out the image
	Selected Window Capture	Window capture
	Region Capture	Capture the selected area
	Pointer	Draw a line freely (* Lines drawn with pointer will not be saved)
	Eraser	Erase overlay
	Turn On/Off Grid	Display grid on the image to check the asymmetry of patients.
	Reset View	Initialize Move, Zoom

## Chapter 8. REPORT Tab

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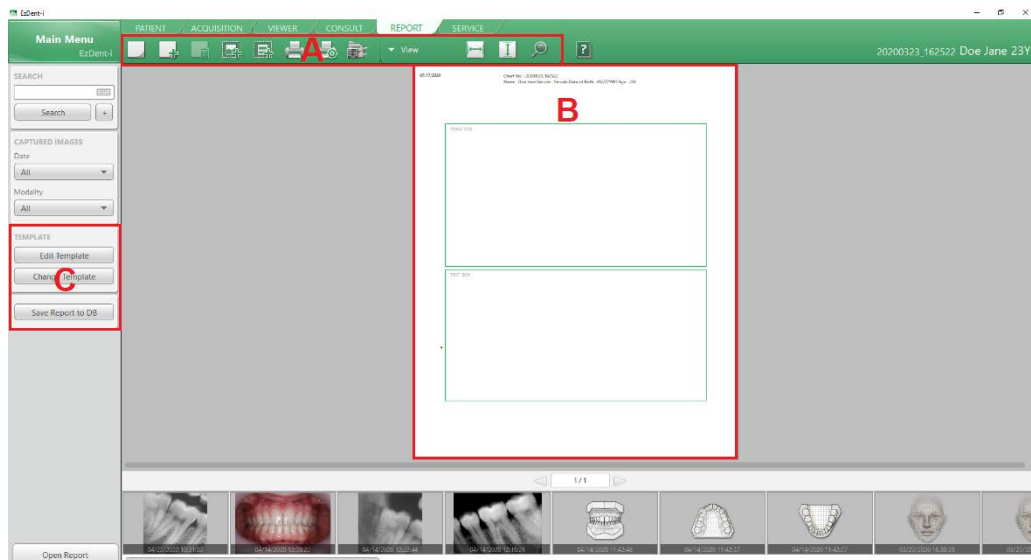


# 1. Configuring REPORT Tab

The Report tab helps users record and manage the diagnosis and consult results. It can also be used as a chart as it records the images and treatment history.

EzDent-i can send the report directly to the patient via email or export to a PDF file.

## 1.1 Workspace



- A: These buttons are for inserting image/ text boxes or creating or exporting reports.
- B: The user can insert images or text to make a report.
- C: The pane includes buttons to edit report templates, change report templates or to save reports.



NOTE

- Patient Information Anonymization  
If you have chosen to use the Privacy Policy Settings (found in [Settings > Others]), the patient information displayed on the PATIENT tab will be marked with asterisks (\*).

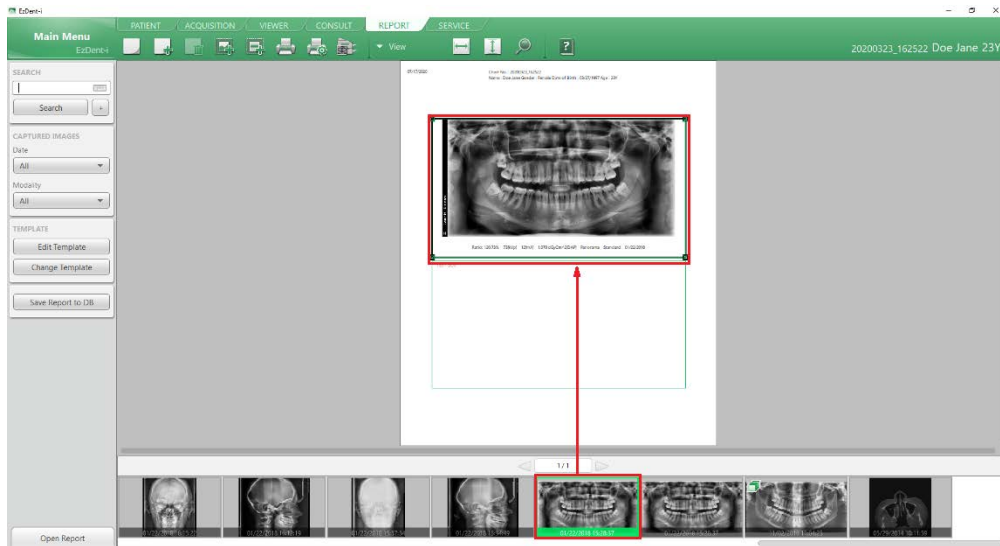
## 2. Creating Report

### 2.1 Inserting an Image Box

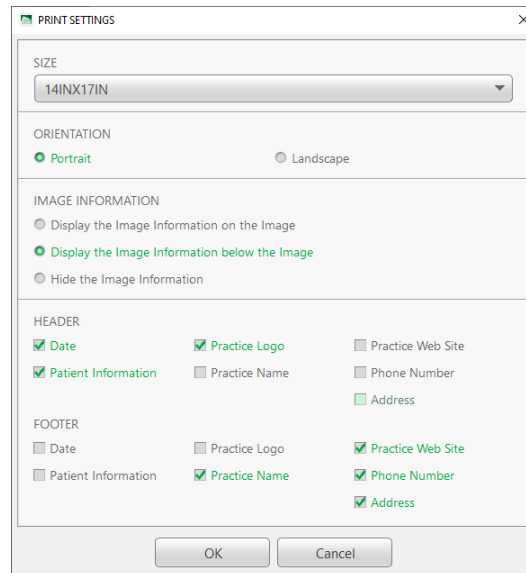
1. Drag and drop images from the image thumbnail filmstrip to the image box to insert.



The image is displayed with windowing/overlay applied in the VIEWER tab.

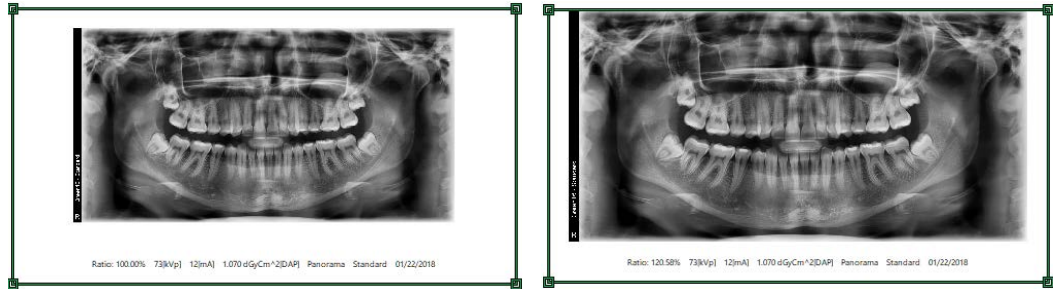


- Set location of the image information with the [Print Settings] icon





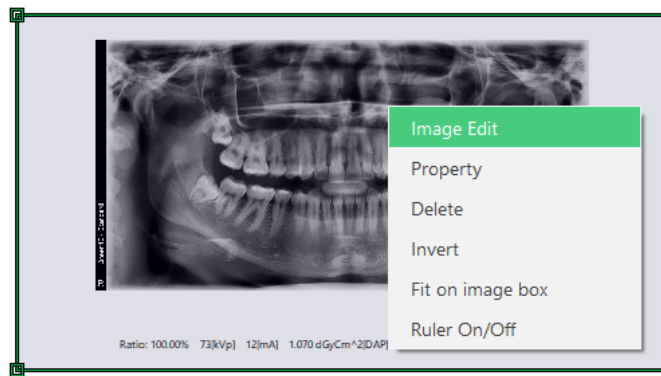
2. Users can see the image in real size or adjusted to fit the window size. For the real size, the image must have a calibration value.



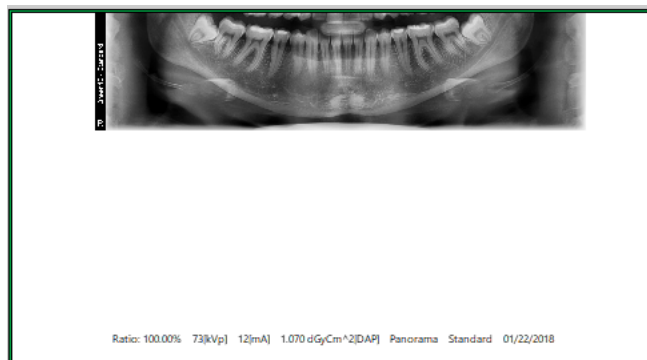
Real Size

Fit on image box

- When the real size of image is bigger than the image box
  - Right click on the image and click the [Image Edit] menu.



- On the Image Edit mode, drag the image to move and display the desired part.



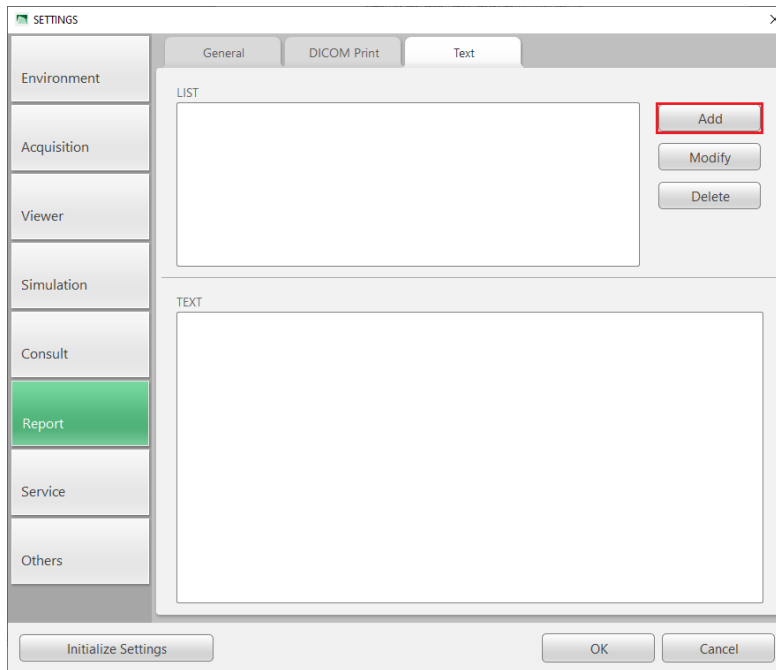
- Right click on the image and click the [Image Edit] menu again to close the Image Edit mode.

## 2.2 Inserting Frequently Used Text

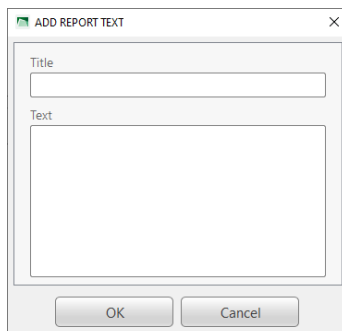
Frequently used text can be saved in the DB. To insert please select from the menu.

Double click the text box to type or edit the text. Use the mouse to change the text box size or to move the box.

1. Click [Main menu > Settings > Report > Text].
2. Click the [Add] button. The [ADD REPORT TEXT] window appears.



3. Type a title for the text box and its contents for later use here, and click the [OK] button. The frequently used text has been saved in DB.



4. To modify the saved text box and its contents, click [Main menu > Settings > Report > Text], and click the [Modify] button.
5. To insert the saved text, go to the REPORT Tab. While a Text Box is in editable mode, right click and the menu list appears. Then select a desired text option from the list menu.



## 3. Editing Report

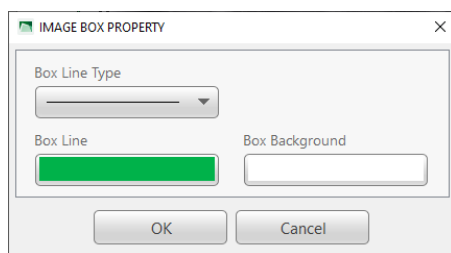
### 3.1 Inserting Image Box

Click the [Insert Image Box] button. The image box is inserted on the report.



- Changing properties

To change the properties of the image box, right click on the image box and click the [Property] option. The [IMAGE BOX PROPERTY] window appears.



- Deleting image box

Right click on the image box and click the [Delete] option.

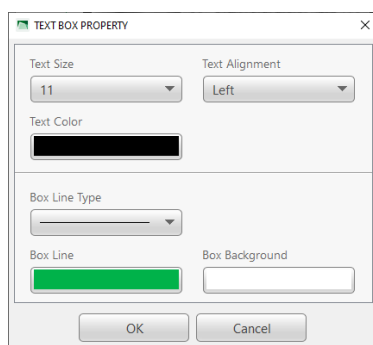
### 3.2 Inserting Text Box

Click the [Insert Text Box] button. The text box is inserted on the report.



- Changing properties

To change the properties of the text box, right click on the text box and click the [Property] option. The [TEXT BOX PROPERTY] window appears.



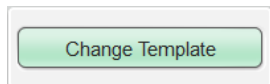
- Deleting text box

Right click on the text box and click the [Delete] option.

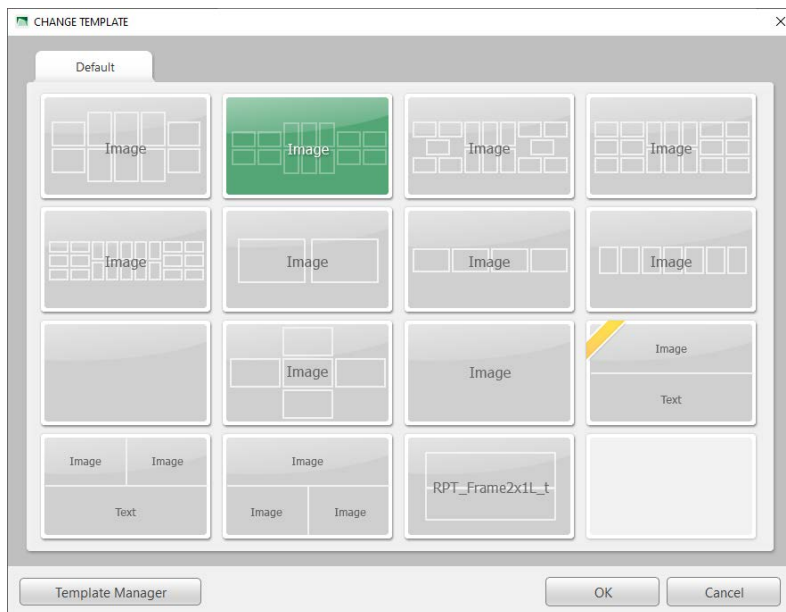
### 3.3 Changing Template

EzDent-i provides various report templates.

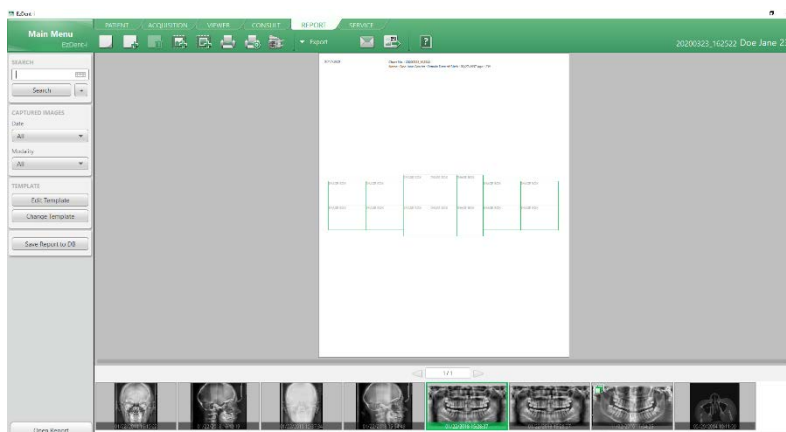
1. Click the [Change Template] button. The [CHANGE TEMPLATE] window appears.



2. Select the desired template and click the [OK] button.



3. [CHANGE TEMPLATE] window disappears and the selected template will be applied.

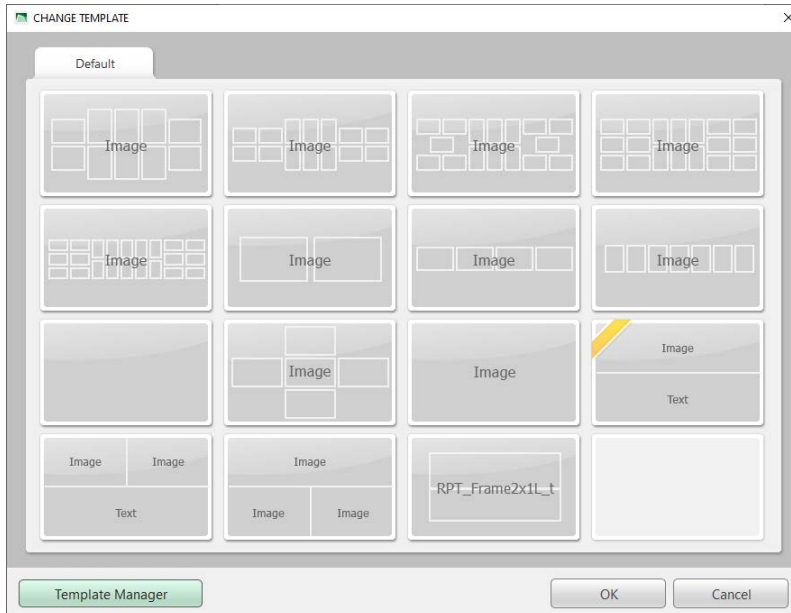


### 3.4 Report Template Manager

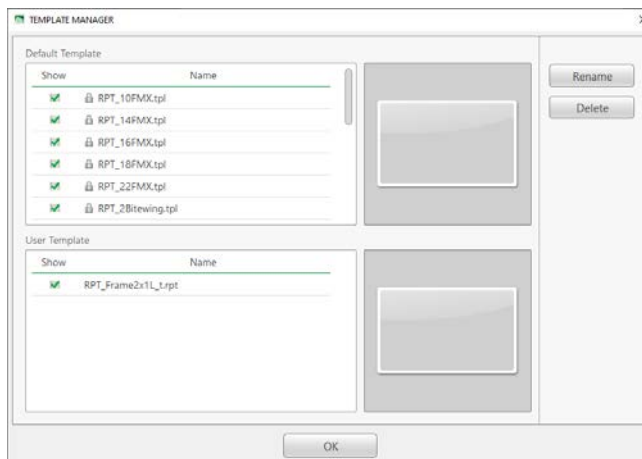
Template Manager provides Show/ Hide function for the defaults templates.

User Templates and make it possible to change the name of user templates.

1. Click the [Template Manager] button. The [TEMPLATE MANAGER] window appears.



2. Check or uncheck the [Show] option for each template to show or side the selected template.

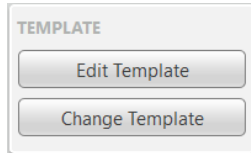


3. For default templates, [Rename] button and [Delete] button are disabled.

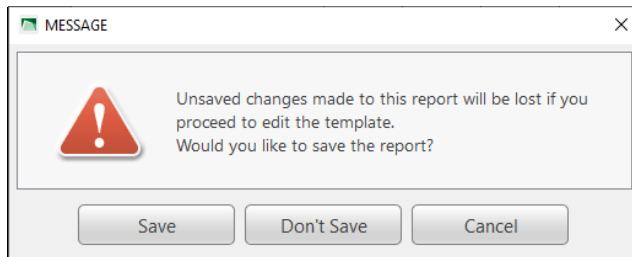
### 3.5 Edit Report Template

The default templates provided by EzDent-i can be edited by the users.

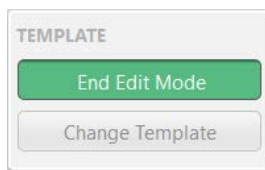
1. Click the [Edit Template] in the [TEMPLATE] option.



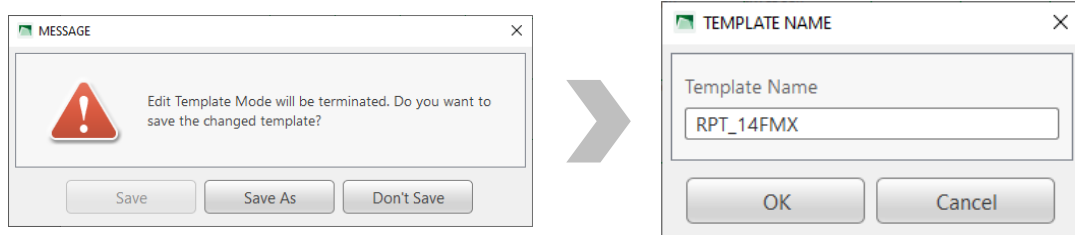
2. "The changes in this report will be deleted. Do you want to save this report?" message will appear. Click the [Save] button to save the report.



3. Create a user template by inserting new image boxes or test boxes based on a default template.
4. When template editing is done, click the [End Edit Mode] button to save the edited template.



5. A message asking "Save Template?" appears, then click the [Save as] button and change the [Template Name].



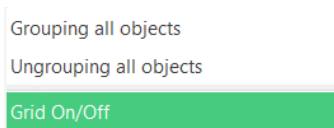
When editing default templates provided by EzDent-I, the [Save] button will be disabled, so only [Save as] option is available.

## 4. Modifying Location and Size of Inserted Text and Patient Images

Users can adjust the size and location of inserted text and patient images.

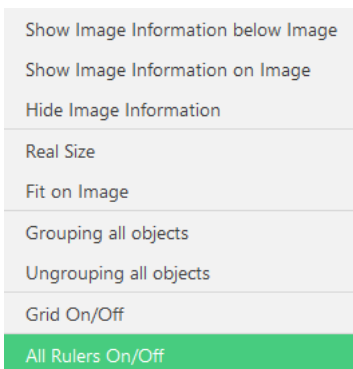
### 4.1 Grid

Users can turn the grid function on and off for exact location and size of the image box. You can edit the exact location or the size.



### 4.2 Ruler

Click the empty space on the report to display or hide a ruler.

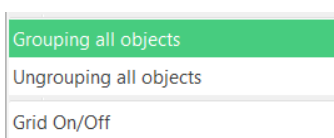


- Rulers ON for all images: Rulers on all images are hidden from the screen.
- Rulers OFF for all images: Rulers on all images appears on the screen.
- Rulers ON for some images and rulers OFF for some images: Rulers on all images are hidden from the screen.

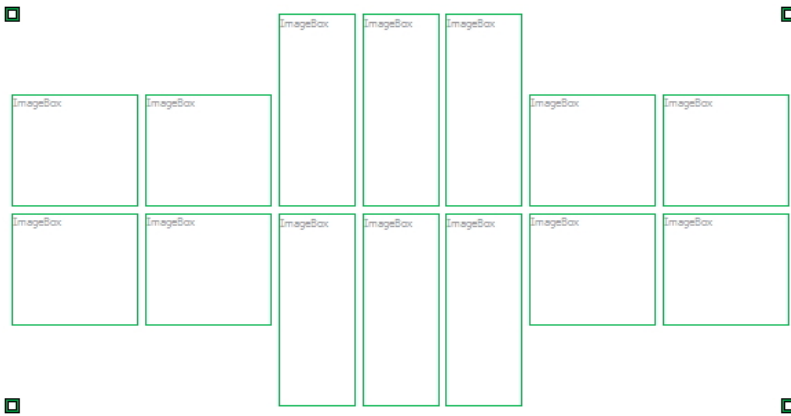
### 4.3 Grouping Images

On the report screen, right click and select the [Grouping all objects] option.

All notes and images can be grouped. Users can change the location and resize all grouped images at the same time.



- Image boxes grouped.



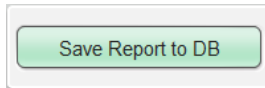
If new image or text boxes are inserted when all the objects are grouped, the objects are removed from the group.



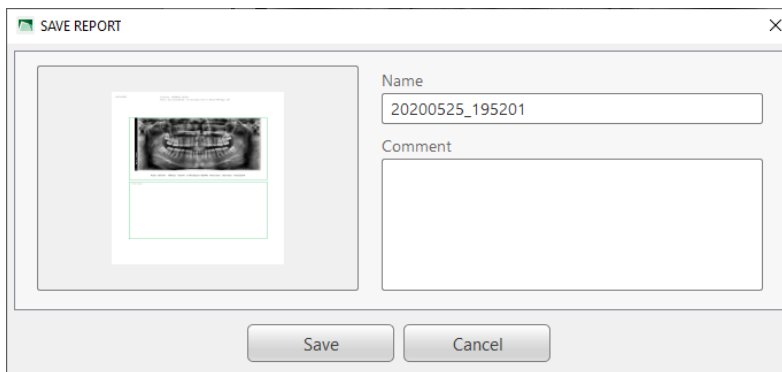
## 5. Saving and Importing Report

### 5.1 Saving Report

1. To save the reports in the BD, click the [Save Report to DB] button. The displayed report in the workspace will be saved.



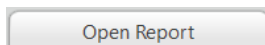
2. Enter the description of a report in the [Comment] section.



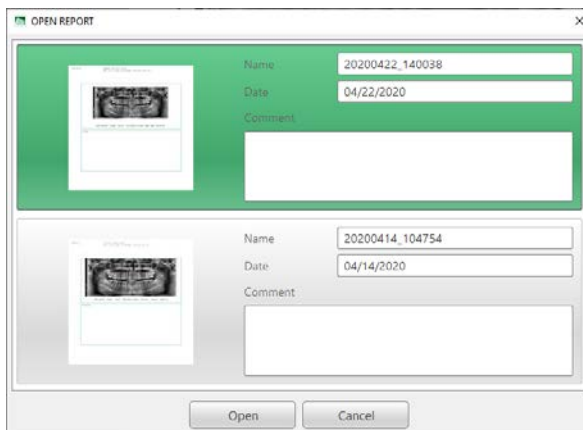
3. Click the [Save] button.

### 5.2 Importing Saved Report

1. Click the [Open Report] button in the lower left corner. The OPEN REPORT window appears.



2. Select the report from the report list and click the [OK] button.



3. The selected report is displayed.

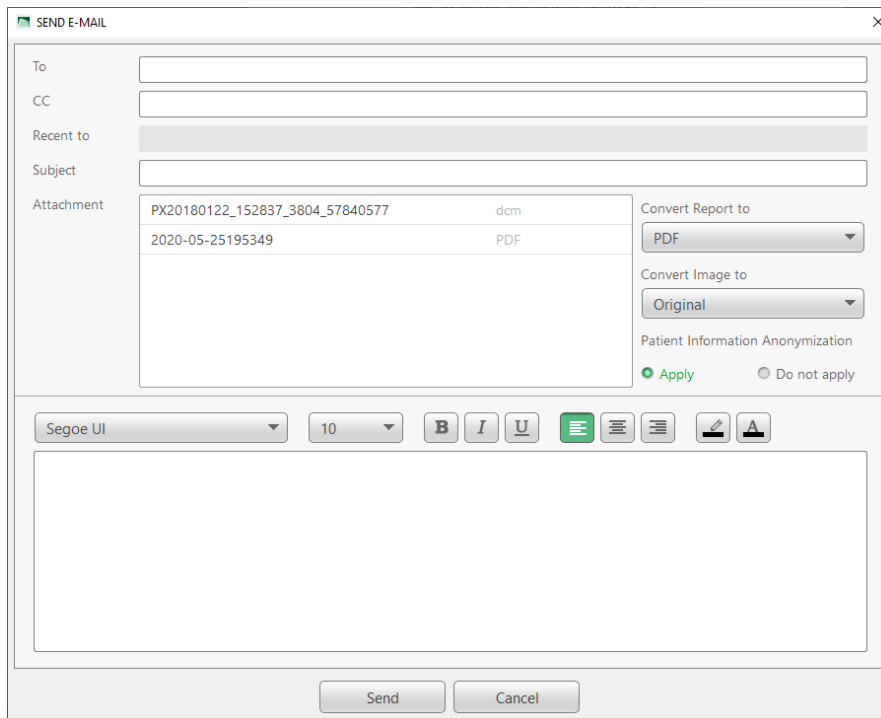
## 6. Exporting Report

### 6.1 Send E-Mail

1. To send completed report via email, click the [Send E-mail] button in the [Export] toolbar.



2. The Send E-mail window appears, with images used in the report and a PDF file already attached.



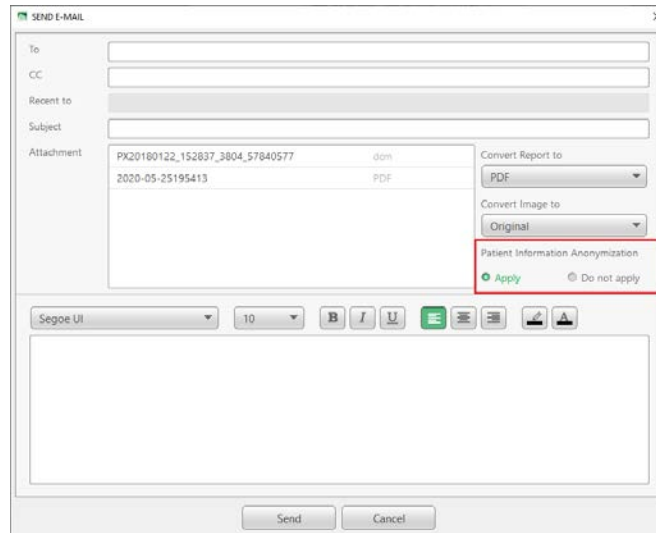
3. The user can change the file type of the attachment to JPG, BMP, TIF or PNG by selecting the [Convert Report to] option.
4. Fill out the [To], [CC], [Recent to], [Subject] and enter the email message.
5. Click the [Send] button.



- Chaning the name of Exporting File  
Double click or right-click on the file name. Then select [Rename] and modify the file name. However, you cannot the CT file name.

- Patient Information Anonymization

If you have chosen to use the Privacy Policy Settings (found in [Settings > Others]), and [Send E-mail] is one of the options chosen under [Anonymize Patient Information], the option below appears when you use the [Send E-mail] function.



If you choose [Apply], the patient information will be anonymized in the resulting file.

## 6.2 Export

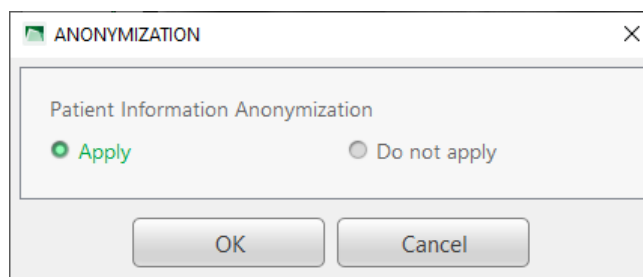
1. To save the report, click the [Export] button.



2. Select the location of the file to save when the [EXPORT] window appears.

- Patient Information Anonymization

If you have chosen to use the Privacy Policy Settings (found in [Settings > Others]), and [Export report] is one of the options chosen under [Anonymize Patient Information], the option below appears when you use the [Export] function.



If you choose [Apply], the patient information will be anonymized in the resulting file.

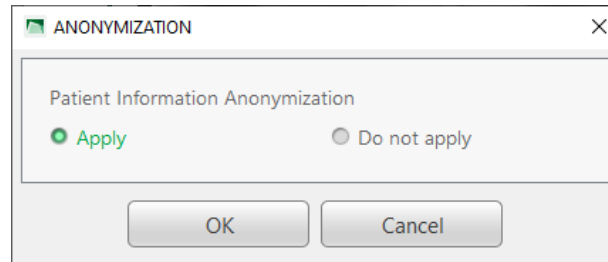
## 6.3 Printing Report

- To print the report, click the [Print] icon on the tool bar.



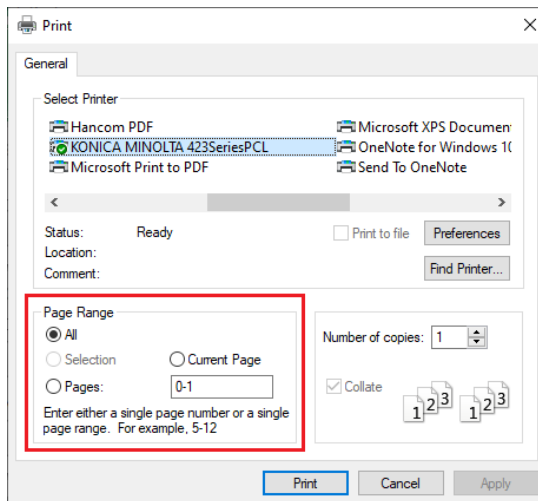
- ### Patient Information Anonymization

If you have chosen to use the Privacy Policy Settings (found in [Settings > Others]), and [Print] is one of the options chosen under [Anonymize Patient Information], the option below appears when you use the [Print] function.

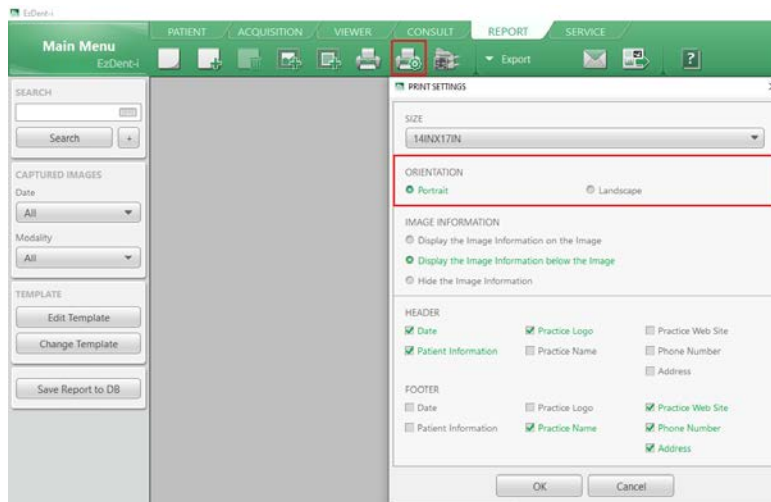


If you choose [Apply], the patient information will be anonymized in the resulting file.

- At this time, the user can set the page range (All, current page, or selected pages) to print.



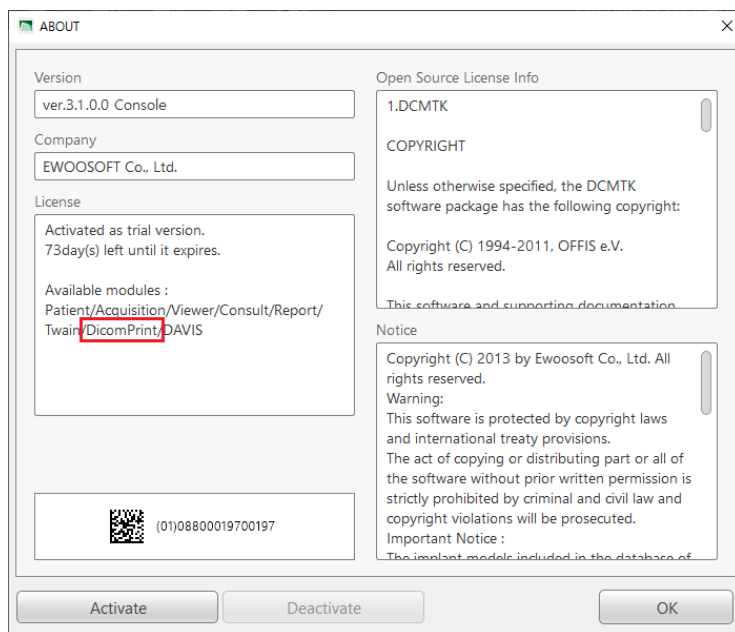
- The report is printed according to the page orientation set in the EzDent-i program, and the orientation set in the System Print window is not applied. To set the page orientation, click the [Print Settings] icon and set it in the [PRINT SETTINGS] window.



If the header/footer items are not selected in the [PRINT SETTINGS] window, the Header/footer item boxes are also not displayed. And the image and text boxes are not adjusted toward the header/footer area.

## 7. DICOM Print

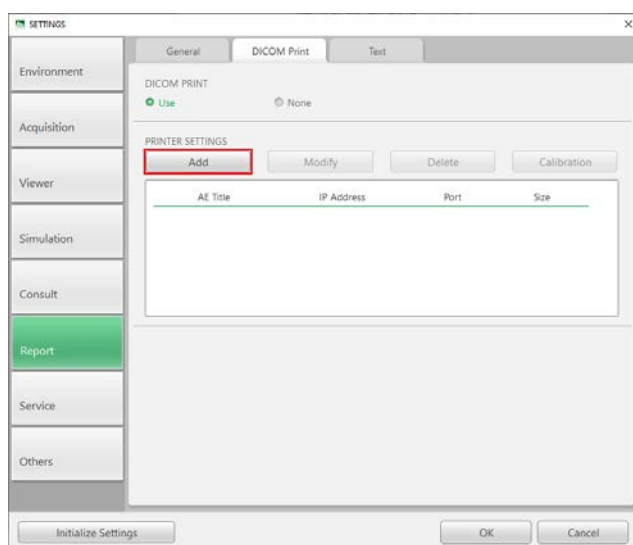
You can print a report that you created in the DICOM print. The separate module for DICOM print is available after purchase. You can confirm whether your current license supports DICOM print or not from [Settings > About].



### 7.1 DICOM Print Setting

It is necessary to set the print property in EzDent-i before using DICOM print.

1. Click [Main menu > Settings > Report > DICOM Print].
2. Click [Add] button to add the DICOM print property that you have in the PRINT SETTING.



3. Enter the DICOM print property in each fields in the [ADD DICOM PRINT] window and click the [OK] button.

**ADD DICOM PRINT**

**NETWORK SETTINGS**

AE Title  IP Address

Port

---

**DICOM PRINT SETTINGS**

Medium Types  Magnification

Destination  Priority

Trim  Empty

4. DICOM Print is added in the setting.

**SETTINGS**

General **DICOM Print** Text

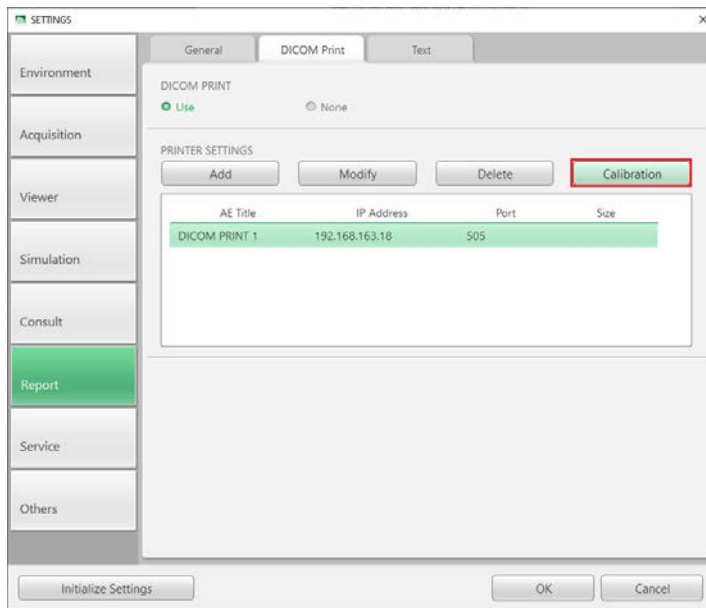
DICOM PRINT

Use  None

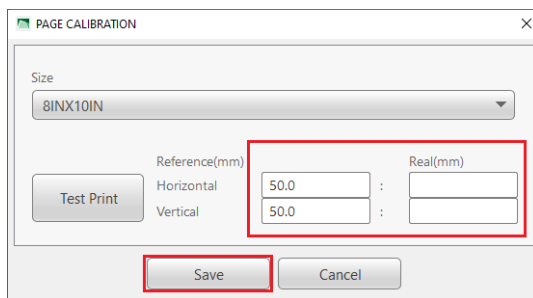
PRINTER SETTINGS

AE Title	IP Address	Port	Size
DICOM PRINT 1	192.168.163.18	505	

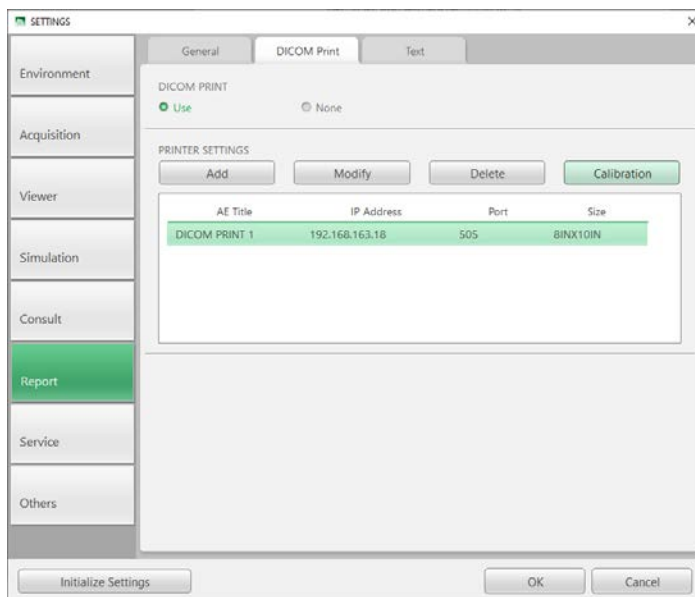
- Click the DICOM Print item from the list to select and then click the [Calibration] button.



- Enter the calibration value of Dicom print in the [PAGE CALIBRATION] window and click the [Save] button.



- Click the [OK] button.



- Click the [Modify] button to change the AE Title of DICOM Print.



## 7.2 DICOM Print

1. Click the [DICOM Print] icon on the toolbar after making a report with images. The [DICOM PRINT] window appears as follows.



AE Title	IP Address	Port	Size
DICOM PRINT 1	192.168.163.18	505	819x1018

Connection Check

Medium Types: BLUE FILM | Magnification: BILINEAR

Destination: PROCESSOR | Priority: MED

Trim: NO | Color of Margin: BLACK

Number of Copies: 1

Patient Information Anonymization:  Apply  Do not apply

Print Cancel

### ■ Patient Information Anonymization

If you have chosen to use the Privacy Policy Settings (found in [Settings > Others]), and [Print] is one of the options chosen under [Anonymize Patient Information], the option below appears when you use the [Dicom Print] function.



NOTE

Patient Information Anonymization:  Apply  Do not apply

If you choose [Apply], the patient information will be anonymized in the resulting file.

2. Select DICOM Print that you want from the list and then the print style such as Medium Types, Destination, Trim, Number of .Copies, Magnification, Priority, and Color of Margin.
3. Click the [Print] button to print when the setting has been complete.

















NOTE

If calibration value was not preset or report is a different size, DICOM Printing is not available.

## 8. Tools

### 8.1 Main Tools

Icons	Designation	Description of Features
	New Report	Creating a new report
	Page Add	Add a page(s)
	Page Delete	Delete a page(s)
	Add Image Box	Add a new image box
	A Text Box	Add a new test box
	Print	Print
	Horizontal Fit	Fill the screen side to side
	Vertical Fit	Fill the screen top down
	Zoom	Enlarge or Reduce the Report page
	Print Settings	Set print
	DICOM Print	Print to DICOM file
	Send Email	Send an email
	Export	Export to a PDF file
	Turn On/Off Overlay	Show/ Hide all displayed objects.



When user adds a new report of page, the report will be created with the latest Header and Footer position

## Chapter 9. SERVICE Tab

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# 1. Configuring SERVICE Tab

Service tab is based on web service called vatech hub that provides teleradiology. vatech hub enables a user to be connected with a center. If a user request teleradiology, radiologists who have specialized knowledge interpret the image based on the registered information. Then, the user can more accurately and quickly diagnose the patient through the result (Teleradiology Reference, surgical Guide, etc).

## 1.1 Workspace

The screenshot displays the vatech hub interface. At the top, there is a navigation bar with tabs for PATIENT, ACQUISITION, VIEWER, CONSULT, REPORT, and SERVICE. The SERVICE tab is active. Below the navigation bar, there is a search bar (A) and a filter section (B) with dropdown menus for Status, Center, Select Date, and Contains Text. The main area is an Order Dashboard (C) with a table of orders. The table has columns for Alarm, Status, Case ID, Order Date, Patient Name, Modality, Center, and Actions. Below the table, there is a CASE PREVIEW panel (D) showing details for Case ID A001-20-21063124, including Order Type (Dental Technology Order), Order Center (Center of SNLH), Time Zone (GMT+09:00 Seoul, South Korea), and Service Hours (12:30 am - 11h30 pm). To the right of the case preview is an IMAGE PREVIEW panel showing file upload progress for PK2106225533.dcm files.

- A: The user can search their patients.
- B: The user can align the order list through this filters.
- C: Order List is displayed.
- D: Case/Image Preview

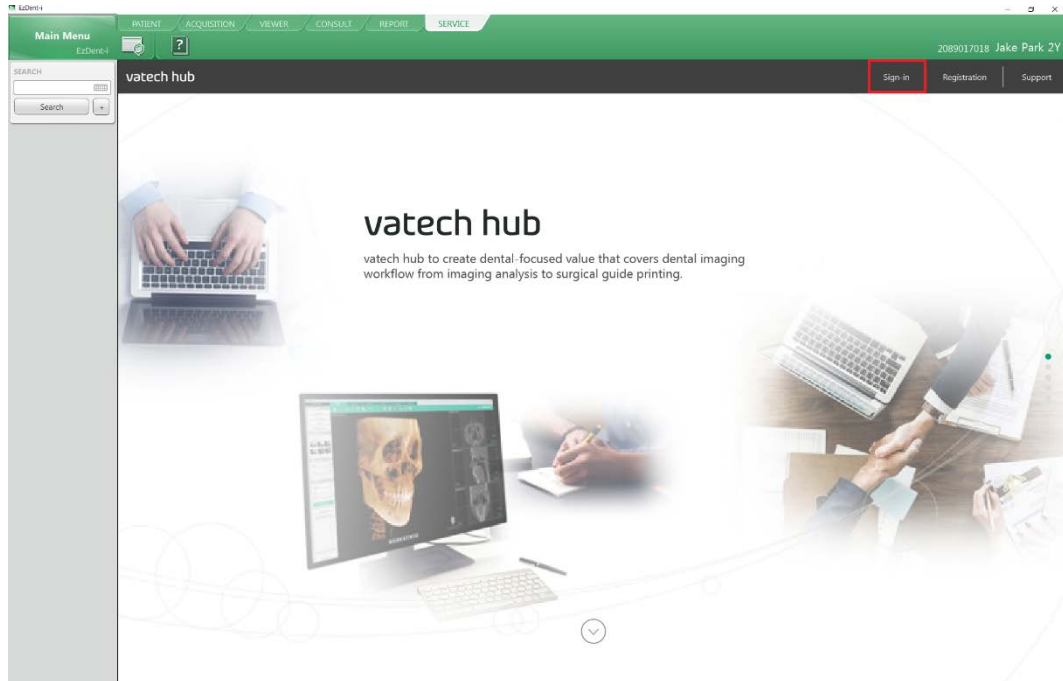
## 2. Starting SERVICE tab



To use vatech hub connected with SERVICE tab, go to [Main Menu] – [Settings] – [Service], and set the connection.

Also, to save result received from vatech hub to EzServer, ID and PW of vatech hub should be entered in TRAgent. TRAgent is a program to receive results from vatech hub and to send them to EzServer.

1. Select the SERVICE tab, and the web view of vatech hub is displayed as shown below. Click the [Sign-in] button at the top of the screen.



2. After entering Clinic/Center Email Address, User ID, and Password, click the [Sign-IN] button. If you stay signed in, select the checkbox marked as [Stay signed in]. However, if the password is changed on the website of vatech hub before executing the SERVICE tab, the function is released.

**vatech hub**

**Sign In**

*Enter your details below*

Clinic/Center Email Address

User ID

Password

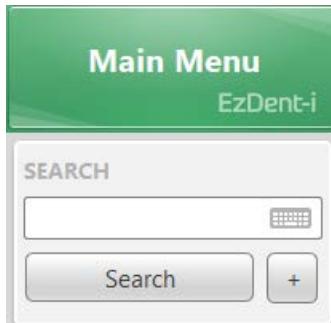
Stay Signed in

**Sign In**

[Forgot Password](#)

### 3. Making Order

1. Search a patient by entering the patient information in the search box at the left of the screen. Otherwise, it is possible to request dental service for the currently selected patient on the order list.



2. Click the [New Order] button.

Alarm #	Status #	Case ID #	Order Date #	Patient Name #	Modality #	Center #	Actions
	Set	A001-20-21063124	09/12/2017	Jake Park	Panorama, Cephalic, CT	Center of SNUH	View Result Confirm
	Set	A001-20-21063111	09/12/2017	Chris Hong	Cephalic	Center of SNUH	View Result Confirm
	Declined	A001-20-21063093	09/12/2017	James Jung	Panorama, Cephalic, CT	Center of SNUH	View Result Confirm
	In Progress	A001-20-21063071	09/12/2017	Scarlet Choi	Panorama	Center of SNUH	View Result Confirm
	In Progress	A001-20-21062990	09/12/2017	Chloe Ji	ID Sensor, Cephalic, CT	Center of SNUH	View Result Confirm
	In Progress	A001-20-21062330	09/12/2017	Dorothy Kim	ID Sensor	Center of SNUH	View Result Confirm
	In Progress	A001-20-21062108	09/12/2017	Patrick Jung	Panorama	Center of SNUH	View Result Confirm
	Ready	A001-20-21062059	09/12/2017	Zoe Yeon	Cephalic	Center of SNUH	View Result Confirm
	Ready	A001-20-21062041	09/12/2017	Jake Park	Johnny Choi	Center of SNUH	View Result Confirm
	Complete	A001-20-21061031	09/12/2017	Jake Park	Danny You	Center of SNUH	View Result Confirm

**CASE PREVIEW** A001-20-21063124

Order Type: Dental Technology Order  
 Order Center: Center of SNUH  
 Time Zone: (GMT+09:00) Seoul, South Korea  
 Service Hours: 12:30 am - 11:30 pm

**IMAGE PREVIEW** File Send Fail (Case ID - Patient Name)

PK210625533.dcm Fail 100%  
 PK210625533.dcm Set 100%  
 File Sending... (Case ID - Patient Name)  
 PK210625533.dcm Sending 100%  
 PK210625533.dcm Set 100%

3. The [New Order] window appears as below.

×

## New Order

**1. ORDER TYPE**

Urgent Order ?
 Teleradiology Order
  Dental Technology Order

**2. ORDER CENTER**

Center

Center Information

**3. ORDER FILE**

Modality  Attached File

File name

Click to add more files (max 10)

**4. PATIENT INFORMATION**

Patient Name \* 
 Date of Birth \* 
 Age \* 
 Sex \*

Patient Name
  Date of Birth 
 Age
  Male

**5. CLINIC INFORMATION**

Reference Doctor \* 
 Clinic Name \*

Phone 1 
 Phone 2

Email Address \*

Address

**6. ORDER COMMENT**

Comment

We have acquired "Consent to release personal information to third parties" from patients

- **Order Type**

Select Teleradiology Order or Dental Laboratory Order. Whether the fields below are activated or not is dependent on the selected order type.



- Order Center

To select a center, click the [Search Center] button. Then, the [Search Center] window appears. You can search the center that you want.

Star	Center Name	Phone	Address	Service Hour	Urgent Hour	Response Time	Indicator
☆	EWOO Dental Center	+82-31-123-456	Hwaseong-si, Gyeonggi-da, Korea	09:00 - 18:30	14:00 - 16:30	Within 1 hour	
★	VATECH ENG Center	+82-31-123-456	Hwaseong-si, Gyeonggi-da, Korea	09:00 - 18:30	14:00 - 16:30	Within 1 hour	
☆	Center of SNUH	+82-31-123-456	Hwaseong-si, Gyeonggi-da, Korea	09:00 - 18:30	14:00 - 16:30	Within 1 hour	
☆	Center of THUH	+82-31-123-456	Hwaseong-si, Gyeonggi-da, Korea	09:00 - 18:30	14:00 - 16:30	Within 1 hour	
☆	ENG Center	+82-31-123-456	Hwaseong-si, Gyeonggi-da, Korea	09:00 - 18:30	14:00 - 16:30	Within 1 hour	
☆	Center of THUH	+82-31-123-456	Hwaseong-si, Gyeonggi-da, Korea	09:00 - 18:30	14:00 - 16:30	Within 1 hour	

Click the icon ⓘ next to the center name, and you will see introduction of center. After selecting the desired center, click the [OK] button.



If you select the checkbox marked [Urgent Order], you can receive the result within the time specified by the corresponding center. However, additional cost is required.

- Order File

Click the [Upload] button. Select modality and image. If the corresponding file has been attached, the file name and the modality are displayed.



Only one modality is selected for teleradiology order and the maximum of 10-modality is selected for dental technology order.

- Patient Information

For the patient registered in EzDent-i, the patient information is automatically entered and it can be modified by user.



- Patient Information Anonymization

If you have chosen to use the Privacy Policy Settings (found in [Settings > Others]), and [Service] is one of the options chosen under [Anonymize Patient Information], the patient information will be anonymized in the [Patient Information] when you click [new order]

- Clinic Information

Based on the current login ID, the clinic information is automatically entered. It cannot be modified by user.

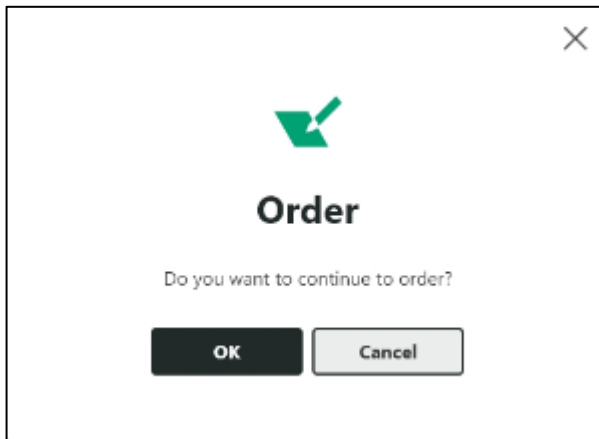
- Order comment

Enter the order-related comment.

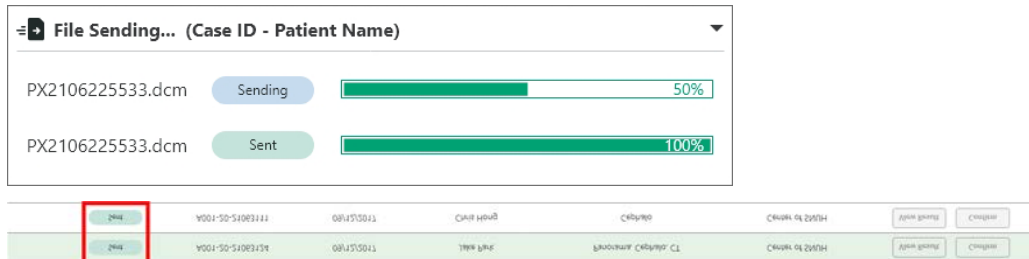


You should select the checkbox marked 'We have acquired "Consent to release personal information to third parties" from patients'.

- Click the [Order] button at the bottom of the window.
- A pop-up message appears as below. Click the [OK].



- If making the order is completed, you can check that the corresponding file is being transmitted. After that, the status of order is displayed as 'Sent'.



## 4. Order Dashboard

### 4.1 Arranging Order List

Select the filter condition or enter text at the top of the screen, and the list will be arranged according to each condition.

Click the [Reset Filter] button to initialize the filter condition.

### 4.2 Order Status

If the information is modified, it is marked as [●]. In case of emergency order, it is marked as [▶]. Also, you can check the processing status of each case.

Alarm	Status	Case ID	Order Date	Patient Name	Modality	Center	Actions
	Sent	A001-20-21063124	09/12/2017	Jake Park	Panorama, Cephalo, CT	Center of SNUH	View Result Confirm
	Sent	A001-20-21063111	09/12/2017	Chris Hong	Cephalo	Center of SNUH	View Result Confirm
▶	Declined	A001-20-21063093	09/12/2017	James Jung	Panorama, Cephalo, CT	Center of SNUH	View Result Confirm
	In Progress	A001-20-21063071	09/12/2017	Scarlet Choi	Panorama	Center of SNUH	View Result Confirm
	In Progress	A001-20-21062910	09/12/2017	Chloe Ji	IO Sensor, Cephalo, CT	Center of SNUH	View Result Confirm
	In Progress	A001-20-21062230	09/12/2017	Dorothy Kim	IO Sensor	Center of SNUH	View Result Confirm
	In Progress	A001-20-21062108	09/12/2017	Patrick Jung	Panorama	Center of SNUH	View Result Confirm
	Ready	A001-20-21062059	09/12/2017	Zoe Yeon	Cephalo	Center of SNUH	View Result Confirm
	Ready	A001-20-21062011	09/12/2017	Jake Park	Johnny Choi	Center of SNUH	View Result Confirm
	Complete	A001-20-21061031	09/12/2017	Jake Park	Danny You	Center of SNUH	View Result Confirm

- Sent: Order Data has been sent to the server.
- In Progress: Center has accepted the order.
- Ready: Teleradiology has been completed, so the result has been registered. User can confirm it.
- Completed: The result has been confirmed by user.
- Declined: Center has rejected the order.

## 4.3 Viewing Existing Order

1. After selecting an existing order to view, double-click the order.
2. The [Order] window is displayed.

✕

### Order

**1. ORDER TYPE**

Urgent Order ⓘ  
 Teleradiology Order     Dental Technology Order

**2. ORDER CENTER**

Center

Center Information

Time Zone	(GMT+09:00) Seoul, South
Service Hours	14:00AM - 16:30PM
Urgent Order	<input checked="" type="checkbox"/>

**3. ORDER FILE**

Modality                      Attached File

+ Click to add more files (max:10)

**4. PATIENT INFORMATION**

Patient Name \*                      Date of Birth \*                      Age \*                      Sex \*

**5. CLINIC INFORMATION**

Reference Doctor \*                      Clinic Name \*

Phone 1                      Phone 2

Email Address \*

Address

**6. ORDER COMMENT**

Comment

Comment

We have acquired "Consent to release personal information to third parties" from patients

3. You can view the order information.



#### ■ Cancellation of Order

If you want to cancel the order, click the [Order Cancel] button at the bottom of the [Order] window. However, it is possible to cancel only the orders whose status is [Sent] or [Declined].

## 5. Viewing Result

### 5.1 Viewing Result in SERVICE tab

1. Select an case to view the result. You can view only the case whose status is 'Ready' or 'Completed'.

**Order Dashboard** New Order

Status: Type or Select Value    Center: Type or Select Value    Select Date: All    Patient Name: contain    Input Field: contain    Reset Filter

#	Alarm	Status	Case ID	Order Date	Patient Name	Modality	Center	Action
01		Sent	A001-20-21063124	09/12/2017	Jake Park	Panorama, Cephalo, CT	Center of SNUH	<span>View Result</span> <span>Confirm</span>
02		Sent	A001-20-21063111	09/12/2017	Chris Hong	Cephalo	Center of SNUH	<span>View Result</span> <span>Confirm</span>
03		Declined	A001-20-21063093	09/12/2017	James Jung	CT, Panorama, Cephalo	Center of SNUH	<span>View Result</span> <span>Confirm</span>
04		In Progress	A001-20-21063071	09/12/2017	Scarlet Choi	Panorama	Center of SNUH	<span>View Result</span> <span>Confirm</span>
05		In Progress	A001-20-21062910	09/12/2017	Chloe Ji	CT, Cephalo, IO Sensor	Center of SNUH	<span>View Result</span> <span>Confirm</span>
06		In Progress	A001-20-21062230	09/12/2017	Dorothy Kim	IO Sensor	Center of SNUH	<span>View Result</span> <span>Confirm</span>
07		In Progress	A001-20-21062108	09/12/2017	Patrick Jung	Panorama	Center of SNUH	<span>View Result</span> <span>Confirm</span>
08		Ready	A001-20-21062059	09/12/2017	Zoe Yeon	Cephalo	Center of SNUH	<span>View Result</span> <span>Confirm</span>
09		Ready	A001-20-21062011	09/12/2017	Johnny Choi	Panorama	Center of SNUH	<span>View Result</span> <span>Confirm</span>
10		Complete	A001-20-21061031	09/12/2017	Dareny You	Cephalo	Center of SNUH	<span>View Result</span> <span>Confirm</span>

2. Click the [View] button of the selected case.

**View Result**

3. The [Result View] window appears as below. You can view the result and the relevant comment. The result file has already been downloaded in EzDnet-i, so every [Download] button is disabled.

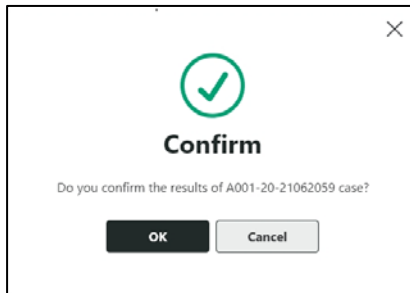
**Result View** ✕

Result Type	File		<span>View</span>	<span>Download</span>
Report	A001-20-21063071.pdf			
Result Type	File		<span>View</span>	<span>Download</span>
Invoice	A001-20-21063072.pdf			
Result Type	File		<span>View</span>	<span>Download</span>
3D Object	A001-20-21063071.stl			
Result Type	File		<span>View</span>	<span>Download</span>
Others	A001-20-21063071.png			
Comment	<div style="border: 1px solid gray; height: 40px; width: 100%;"></div>			
<span>OK</span>				



If the result type is '3D Object' and 'Others', you should install the corresponding viewer program and register it in EzDent-i.

4. After that, click the [Confirm] button of the case. If a confirmation message appears, click the [OK] button.



If 7days elapses from the first date when you confirmed it first, its status will be dealt with as 'Confirm'.

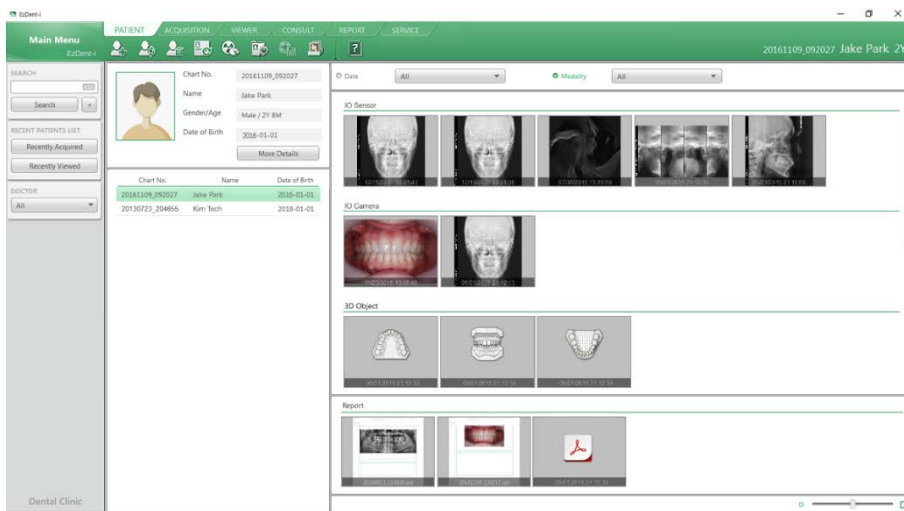
5. The status of confirmed case is changed from 'Ready' to 'Completed'.

## 5.2 Viewing Result in the PATIENT tab

1. Click the [PATIENT] tab at the top of the screen.
2. Select a patient whose teleradiology has been completed.

Chart No.	Name	Date of Birth
20161109_092027	Jake Park	09/27/2016
20130723_204855	Kim Tech	02/07/1985

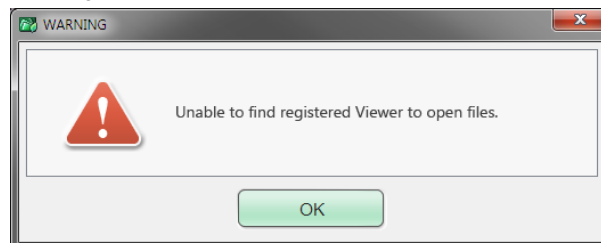
3. Thumbnails of result file are classified by result type. Double click the desired thumbnail, and a viewer program for each file format will be executed to view the file.



If the viewer program for the corresponding file is not registered in EzDent-I, an error message will appear as below.



NOTE







# Chapter 10. VTFMXLayoutEditor Tool

1. Purpose of Using VTFMXLayoutEditor .....	211
2. Starting VTFMXLayoutEditor .....	212
3. Adding, Modifying and Deleting FMX.....	213



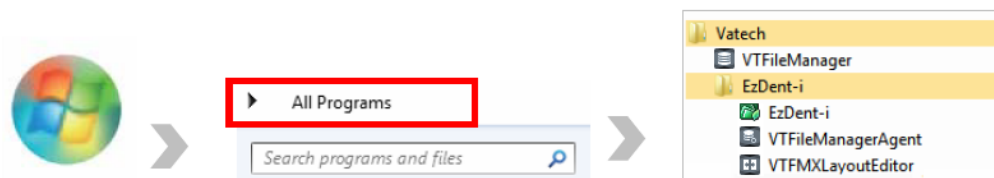
## 1. Purpose of Using VTFMXLayoutEditor

The user can make customized FMX layouts with images acquired from IO Sensor in Acquisition tab, EzDent-i.

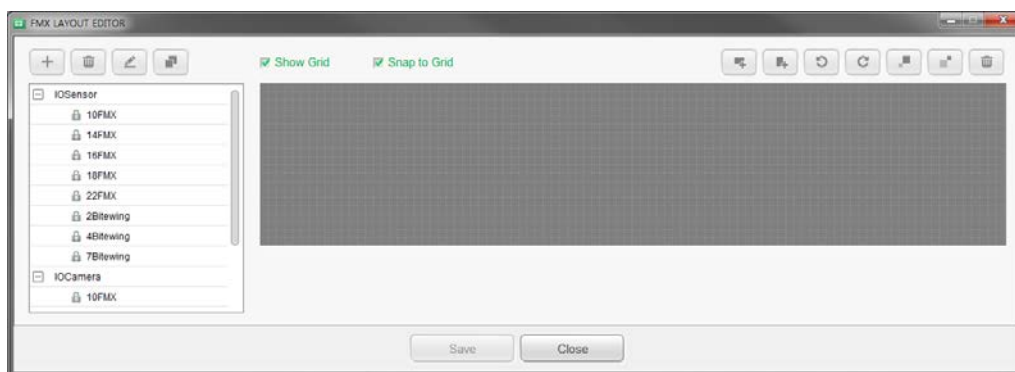
## 2. Starting VTFMXLayoutEditor

To open VTFMXLayoutEditor, click along the following order.

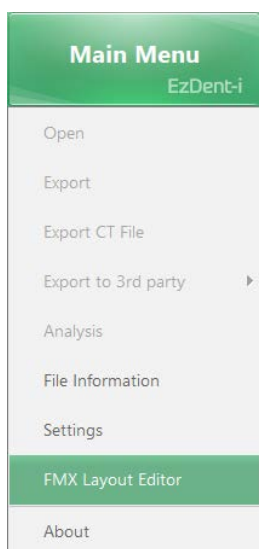
1. Start button → All program → Vatech folder → EzDent-i folder.



2. Select the VTFMXLayoutEditor item in the EzDent-i folder. Then, the program will be opened.



- After running EzDent-i, click [Main menu > FMX Layout Editor] to open the FMX layout editor faster.







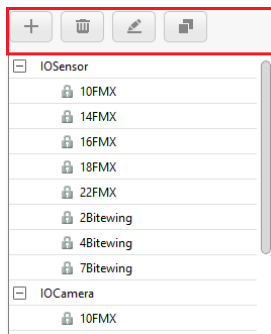
### 3. Adding, Modifying and Deleting FMX

To create, edit, or delete new FMX layout using VTFMXLayoutEditor, perform the following steps.

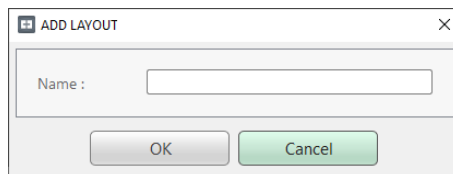
#### 3.1 Adding a New FMX

You can add a new layout, modify, and delete with the button on layout list highlighted below. The functions and directions for use are shown below.








Icons	Designation	Description of Features
	Add layout	Creates a new layout
	Delete layout	Deletes the selected layout
	Rename layout	Modifies the selected layout name
	Copy layout	Create a new layout by copying the selected layout



1. Select a layout at random from the default layouts and click [Add Layout] button. The [ADD LAYOUT] window appears.
2. Select the file path for saving the layout, enter FMX name, and click the [OK] button.



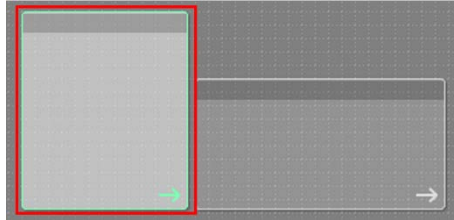
3. The user can make a desired layout with adding, changing direction, minimizing, and deleting the mount.

Icons	Designation	Description of Features
	Add horizontal mount	Adds long horizontal rectangle
	Add vertical mount	Adds long vertical rectangle
	Rotate to left 90 degree	Changes mount direction to left
	Rotate to right 90 degree	Changes mount direction to right
	Magnify mount size	Magnifies the size of total Layout
	Reduce mount size	Reduces the size of the total Layout
	Delete selected mount	Deletes the selected mount

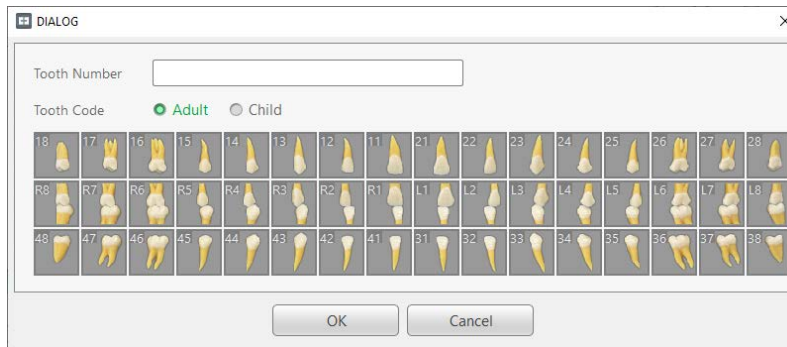
Icons	Designation	Description of Features
<input checked="" type="checkbox"/> Show Grid	Move mount by Grid	Show/High of Grid
<input checked="" type="checkbox"/> Snap to Grid	Snap to Grid	Moves mount adjusting to Grid paper

What is a mount?

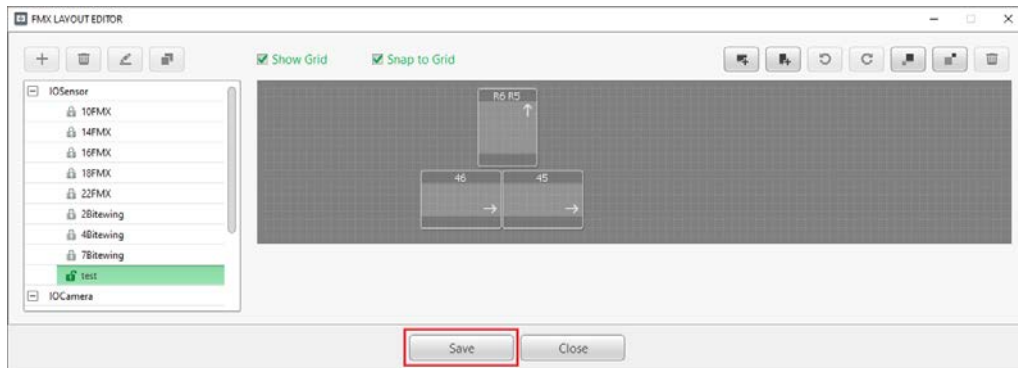
Each of the boxes consisting of FMX layout is called as a mount.



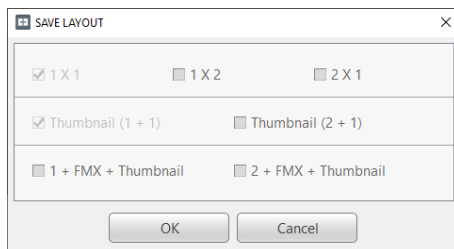
- Double click the mount to designate the tooth number in the mount. Select the tooth number and click the [OK] button in the [DIALOG] window.



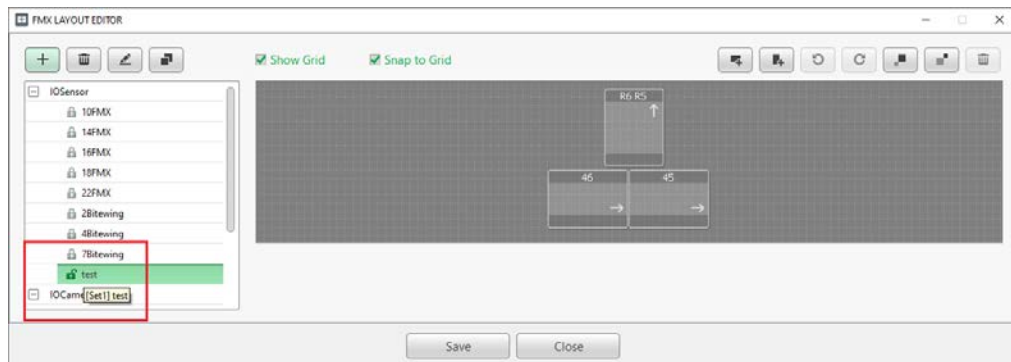
- After completing the addition, click the [Save] button.



- The [SAVE LAYOUT] window appears and click the [OK] button.



- The added layout appears on the list of the [FXM LAYOUT EDITOR] window and the Set, in which the layout is included, is displayed in the tool tip when hovering the mouse over the layout name.

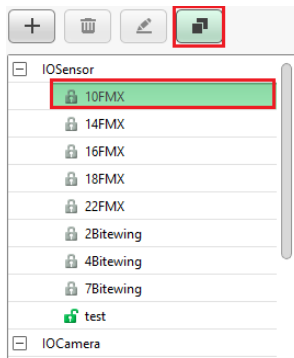


- After the layout is saved, go to Acquisition Tab and click the [Layout Manager] button in the ACQUISITION tab to see the layout is added to the list in the.

### 3.2 Creating a New FMX Layout by Editing Existing One

Create a new layout by copying the selected one. If the user prefers to not make a new layout, you can simply change an existing layout.

- Click the [Copy Layout] button after selecting the existing FMX layout.



- Enter the file path, FMX name, and click the [Confirm] button.
- The selected layout name has been changed and added. Click [Save] button and then [Close] button after changing the mount. The added layout appears from [Change Layout] in the ACQUISITION tab.

### 3.3 Renaming FMX layout

You can change the layout name by clicking the [Change layout name] button after selecting the FMX layout.

You can change the corresponding layout in the workspace on the right when selecting one from FMX layout list on the left.

### 3.4 Deleting FMX layout

You can delete the corresponding layout when clicking the [Delete Layout] button after selecting the FMX layout.





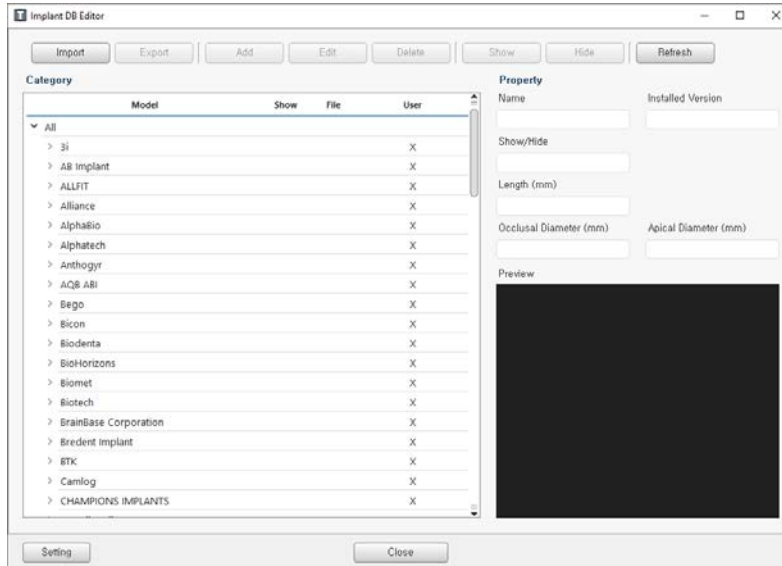
# Chapter 11. ImplantDB Editor

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2. Starting ImplantDB Editor .....	220
3. Using ImplantDB Editor.....	221



# 1. Purpose of Using ImplantDB Editor

ImplantDB Editor enables users to add implant data to the Implant DB and edit or delete implant data that they added to the DB.

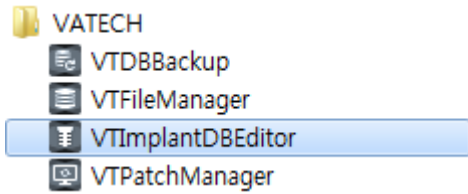


Please refer to *Chapter 1. installation for ImplantDB Editor installation.*

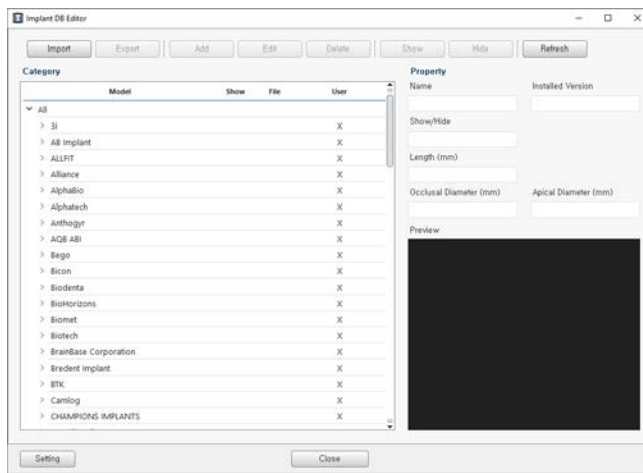
## 2. Starting ImplantDB Editor

Run ImplantDB Editor as the following steps.

1. Press the window start menu to activate program search window.
2. Go to VATECH folder and run the VTImplantDBEditor.



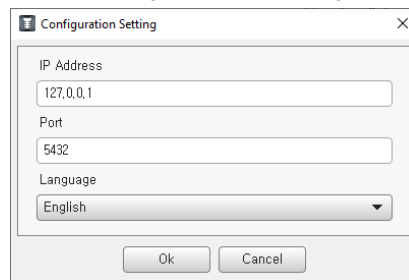
3. ImplantDB Editor program appears.



Press [Settings] button for configuration settings such as IP address, port and language



NOTE

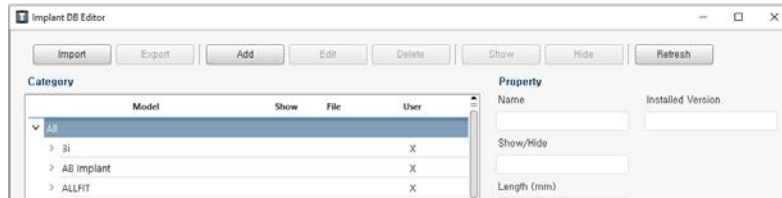


## 3. Using ImplantDB Editor

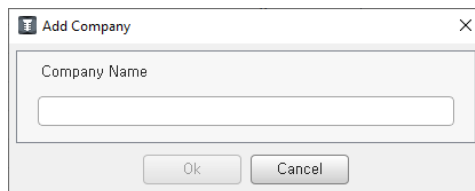
### 3.1 Adding ImplantDB

- Adding Company

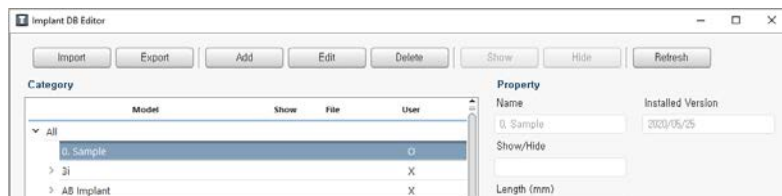
- Click the top rank category, [All], to activate [Add] button.



- Select [Add] button, type Company Name and click [Ok] button.

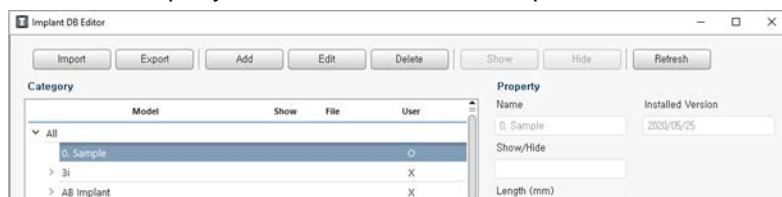


- The company name is added to the list.

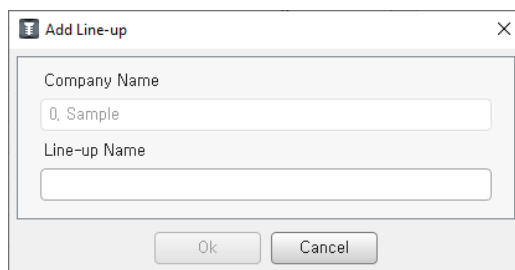


- Adding Line-up

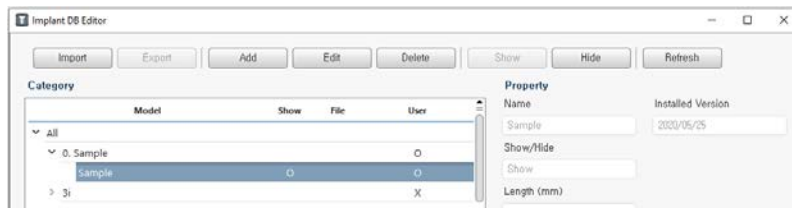
- Click the company name to add a new line-up to.



- Select [Add] button, type Company Name and click [Ok] button.



- The line-up is added to the list.

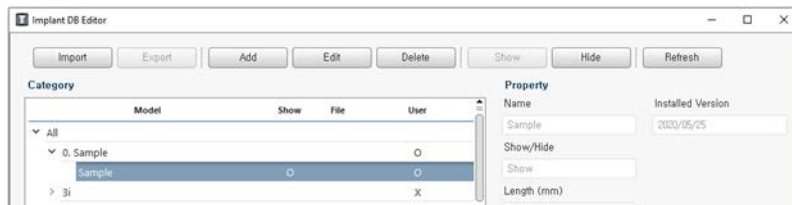


▪ Adding Implant Model

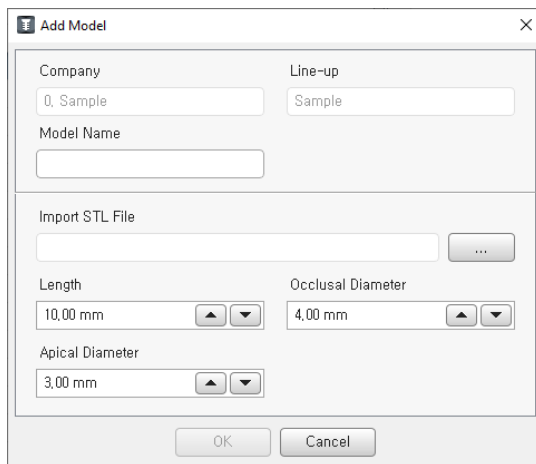


Users can only add implant models that received 510K clearance from FDA. It is the user's responsibility to check the implant models provided by manufacturers and to use models that are already proved safe for the safety of patients.

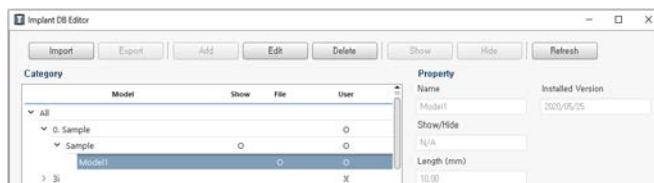
- Click the line-up name to add a new implant model to.



- Select [Add] button and type Model Name.



- Click [...] next to Import STL File option to import the desired STL file.
- Click [OK], then the selected STL will be added to the list of the parent line-up and company.



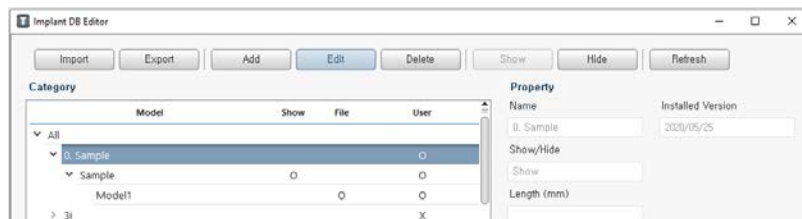
## 3.2 Editing ImplantDB



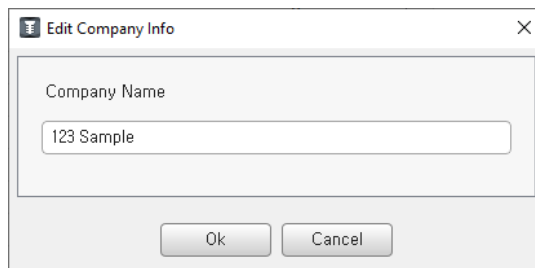
The default implant models, line-ups, companies provided by EWOOSOFT are not editable so the [Edit] button is disabled.

- **Editing Company**

1. [Edit] button is enabled when the user select a user-added company.



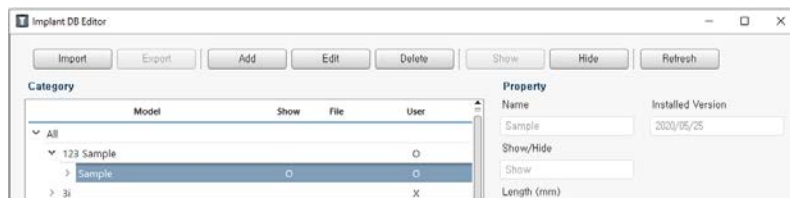
2. Click the [Edit] button and edit the company name and click [ok] button.



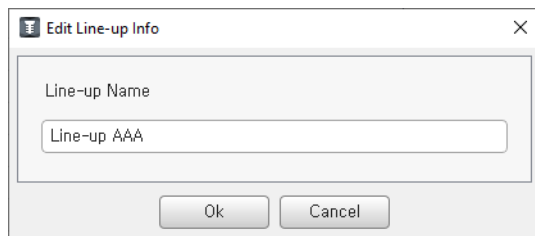
3. Implant DB Editor updates the changed company name.

- **Editing Line-up**

1. [Edit] button is enabled when the user select a user-added line-up.

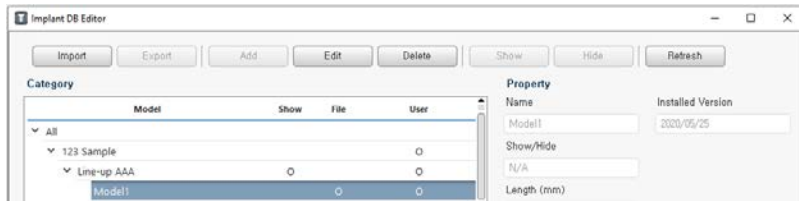


2. Click the [Edit] button and edit the line-up name and click [ok] button.

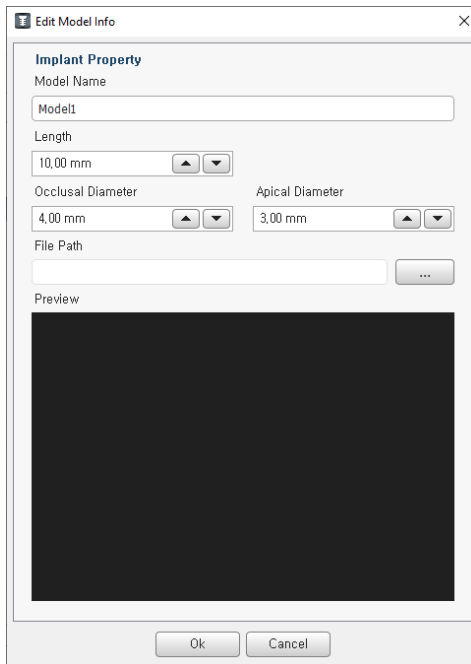


3. Implant DB Editor updates the changed line-up name.

- Editing Implant Model
  1. [Edit] button is enabled when the user select an user-added implant model.



2. Click the [Edit] button and edit the Model Name or select a new implant model.



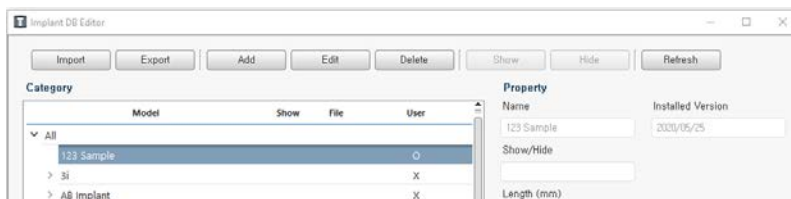
3. Implant DB Editor updates the changed implant model info.

### 3.3 Deleting from ImplantDB



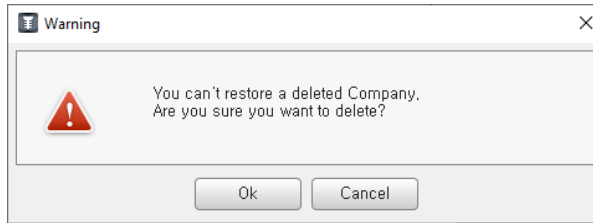
The default implant models, line-ups, companies provided by EWOOSOFT cannot be deleted so the [Delete] button is disabled.

- Deleteing Company
  1. [Delete] button is enabled when the user select a user-added company name.





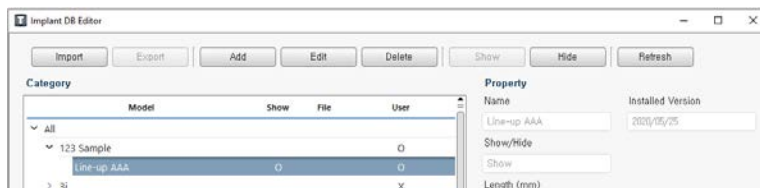
- Warning messages appears. Press [OK] button.



- The selected company name is deleted from the list.

- Deleting Line-up

- [Delete] button is enabled when the user select a user-added line-up name.



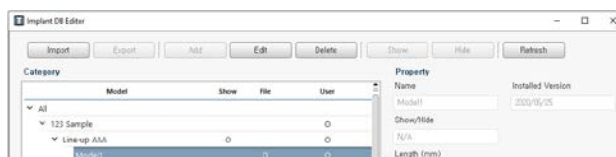
- Warning messages appears. Press [OK] button.



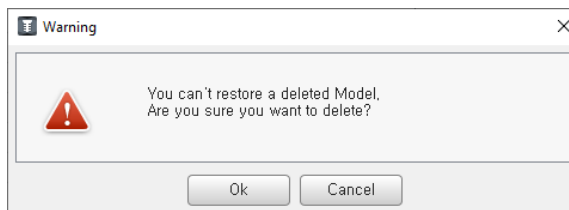
- The selected line-up is deleted from the list.

- Deleting Implant Model

- [Delete] button is enabled when the user select a user-added implant model.



- Warning messages appears. Press [OK] button.



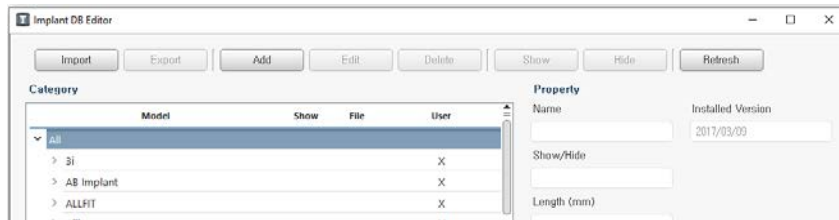
- The selected implant model is deleted from the list.

### 3.4 Importing/ Exporting

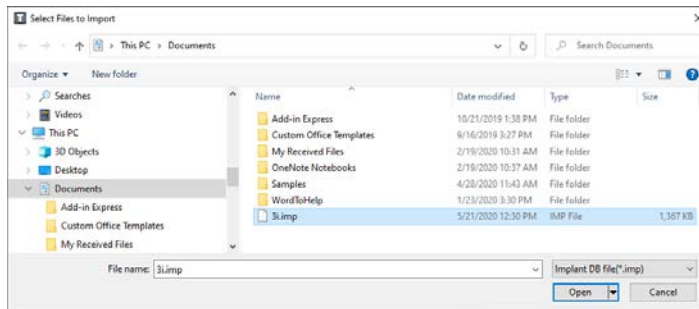
Implant DB Editor exports the selected companies line-ups, models as a form of implant DB file (.imp).

Also it is possible to import implant DB file from the user's PC.

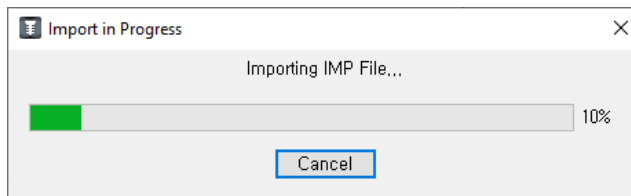
- Importing
  1. Click the [Import] button.



2. Select a file to import on the [Select Files to Import] dialog and press the [Open] button.

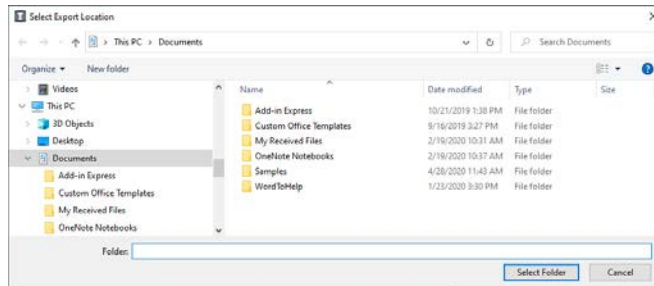


3. Wait until the import process is completed.

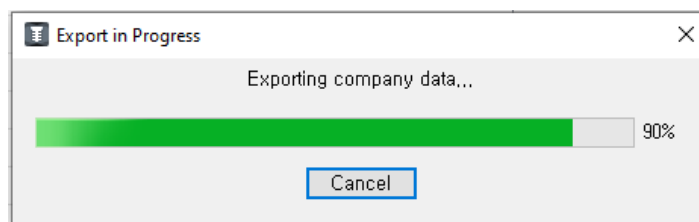


4. The imported imp file is added to the category.

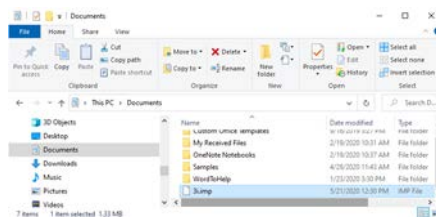
- Exporting
  1. Click the [Export] button.
  2. Select the location to export the selected file and press [Select folder]



3. Wait until the export process is completed.



4. The exported imp file is created in the selected folder.



### 3.5 Show/ Hide

Show/Hide button is located on the top ImplantDB Editor dialog to show or hide the selected companies or line-ups. The company or line-up information is shown/hidden on the list on the Implant simulation dialog.





# Chapter 12. TRAgent

1. Using TRAgent..... 231



# 1. Using TRAgent

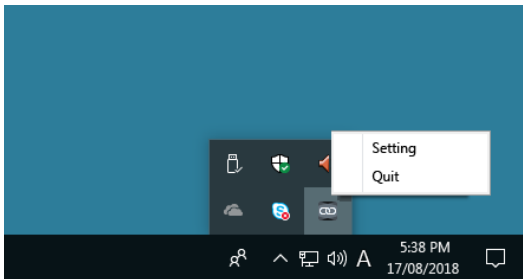
TRAgent is a program that receives the reading result from vatech hub and sends it to EzServer.

## 1.1 Starting TRAgent

TRAgent is automatically executed when your PC is started.

## 1.2 Exiting TRAgent

Click the TRAgent tray icon, and its context menu will appear. Click [Quit].



## 1.3 Setting

Click the TRAgent tray icon, and its context menu will appear. Click [Setting].

 A screenshot of the 'TRAgent Setting' dialog box. The dialog has a title bar with a question mark and a close button. The main area is titled 'vatech hub' and contains four input fields: 'URL' (with the text 'https://api.vatech-hub.com'), 'Clinic Email Address (Account Manager)', 'ID', and 'Password'. Below the 'Password' field is a 'Test' button. At the bottom of the dialog is a 'Close' button.

- vatech hub: Input the URL and the user's account information and click on [Test] to check the connection.

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# EzDent-i

Version : 3.1