SURGICAL PLANNING



Instructions for Use





Table of Contents

Introduction	5
Indications for Use	5
Target Population	5
Type of Users	5
Precaution for Use	6
Contraindications	6
Warnings	6
Prerequisites and Context of Use	6
Validity Limit of Patient Data	6
Software Operation	6
Precision on Values	7
Saving	7
Possible Secondary Effects	7
Minimal Configurations	7
System Input Requirements	7
Advised Configurations	7
Screen Resolution	8
Mouse and Trackpad	8
Internet Configuration	8
Web Browser Cache	8
Enabling Hardware Acceleration	9
Security Recommendations	9
User Credentials	9
User Environment	10
User Access	11
Application's Servers	11
Information to the User	12
Report a Cybersecurity Incident	12

Surgical Planning Instructions for Use



Product Information	13
Contact Us	14
Appendix 1: Clearing your Browser Cache	15
Google Chrome	15
Edge	15



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NOTE

Any personal data appearing in the screen captures of this document is fictional.



WARNING

The instructions for use may be updated at any time by the manufacturer. To benefit from the latest content, always consult the version available online.

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Introduction

The surgical planning application is an online medical device accessible from the EOS Insight platform at the following address: https://eos-insight.com/ from the United States.

Using the surgical planning application requires training by a qualified employee from Alphatec Spine or EOS imaging.

The surgical planning application Instructions for Use is available in an electronic version as a PDF from the page https://atecspine.com/ifu-documentation/ of the ATEC website. The functions of surgical planning are described in a dedicated user manual that are available upon request.

A PDF version of the User Manual can be sent by contacting EOS imaging (see "Contact" section). Additionally, a paper version of the Instruction for Use or the User Manual can also be sent by contacting EOS imaging (see "Contact" section).

In the event of a minor software update that does not require additional training, the user will receive a report by email listing the changes included in the new version available.

Indications for Use

Surgical planning application is indicated for assisting healthcare professionals with preoperative planning of spine surgeries. Surgical planning application provides access to EOS images with associated 3D datasets and measurements. Surgical planning application includes surgical planning tools that enable users to define a patient specific surgical strategy.

Target Population

The surgical planning application is recommended in the preoperative planning of primary and revision spine surgeries for:

- Degenerative spine and adult spinal deformity.
- Adolescent Idiopathic Scoliosis (AIS) patients.

Type of Users

The surgical planning application can only be used by a trained user including:

- Spine surgeons to define and validate the surgical plan.
- EOS staff and implant distributors to define and save the optional pre-planning.

NOTE

The surgical planning application offers premium features to ATEC interbody spacer users allowing them to access ATEC interbody spacer portfolio.



Precaution for Use



IMPORTANT

Read the user manual carefully before using.

Contraindications

The surgical planning application is contraindicated for cases with vertebrae with severe congenital deformities (e.g., hemivertebrae, spina bifida, etc.) and supernumerary/missing vertebrae.

Warnings

Prerequisites and Context of Use



WARNING

The surgical planning application can only be used by trained and experienced users.

Users must ensure that the patient's identity matches that of the patient they are preparing to operate on.

Users shall also check that the date of birth displayed in the software is identical to the date indicated in the patient file. Dates in the surgical planning application are displayed in international format: YYYYY-MM-DD (Year-Month-Day).

The surgical planning application is an online planning solution designed as a decision support for trained medical specialists. The software should not be used as the sole basis for making clinical decisions relating to patient diagnosis, treatment, or care.



The surgical planning application uses 3D spine models based on EOS images generated with a specific software, VEA Align in 3D mode. Inherently, the limitations for surgical planning are the same as VEA Align in 3D mode limitations. More precisely, 3D spine models can become inaccurate and even impossible when anatomical structures cannot be identified as such in the following cases: prostheses or instruments masking or replacing anatomical markers or certain pathological conditions that alter the bone composition, such as osteoporosis.

Validity Limit of Patient Data



WARNING

The patient's anatomy is subject to change. A case will be posted for surgical planning if the time between the acquisition of the patient's images and surgery does not exceed six months.

Software Operation

The browser may crash and lose WebGL functionality, making surgical planning impossible. WebGL enables 3D elements to be managed in the browser. Software detects WebGL accidents and proposes, through an information message, to relaunch the surgical planning to continue.



NOTE

To ensure optimal software functionality, users should avoid opening the same planning simultaneously in multiple tabs

Precision on Values

All values displayed in the software are rounded to the nearest degree or millimeter.

Saving



WARNING

When saving, it is important to keep the browser open and avoid refreshing the page or shutting down the computer until the process concludes.

Possible Secondary Effects

There are no known side effects associated with the use of the surgical planning application.

Minimal Configurations

The surgical planning application should be used with the minimal configuration specified in this document. EOS imaging cannot guarantee the proper functioning of the surgical planning application if minimal configuration is not met.

The surgical planning application is not designed for use on mobile devices.

System Input Requirements

Software compatibility is limited to the data provided by VEA Align product version 2.0.0 and higher.

Advised Configurations

The minimal configuration of the user's computer is the following:

- A stable internet connection is required (see "Internet Configuration" section).
- With Windows 10 or 11: Google Chrome in version 121 or higher, and Edge in version 121 or higher.
- With Mac OS Monterey or Ventura: Google Chrome in version 121 or higher.



It is the user's responsibility to keep his/her web browser up to date for better functioning of the software.



WARNING

For optimal use of the surgical planning, the web browser and computer zoom must be set to 100%.

Screen Resolution

EOS imaging cannot guarantee the full display of the interface on screens that do not meet the minimum required resolution.

The minimum screen resolution ensuring full display of the interface is 1366 x 768.

NOTE

HD screens are compatible with the application.

Mouse and Trackpad

An optical mouse is recommended for better software use. A trackpad may be sufficient (in Mac and PC environments) but not recommended. The use of a "Magic Mouse" is not recommended (in the Mac environment).

NOTE

The "trackpad" drivers must be up to date to zoom into the software. Otherwise, it would zoom in the browser window (unwanted effect).

Internet Configuration

A stable high speed internet connection is required: DSL 100Mb/s connection or higher, Wi-Fi or Ethernet.

NOTE

Other connections such as a 5G/4G/3G connection can be used, but they must be stable. The user may then experience a relatively long load time for the software.

Web Browser Cache

Complete instructions regarding cache management to ensure the proper functioning of surgical planning.

EOS imaging cannot guarantee the proper functioning of surgical planning if instructions are not followed correctly.



When a new version of the software is deployed, it is strongly recommended that the web browser cache be emptied. The "Appendix 1: Clearing your Browser Cache" explains how to perform this operation.

Enabling Hardware Acceleration

It is possible to improve the fluidity of some browsers by activating the hardware acceleration of the computer.

The following are the methods to be used for each browser:

- Google Chrome:
 - Type chrome://settings/ in the address bar, then press Enter.
 - o A web page opens. At the bottom click on "System"
 - o Enable "Use hardware acceleration when available."
- Microsoft Edge:
 - Type edge://settings/profiles in the address bar, then press Enter.
 - A web page opens. At the bottom click on "System and performance"
 - Enable "Use graphics acceleration when available"

Security Recommendations

The use of the surgical planning application does not require any additional software on the user's computer except an up-to-date web browser.

The surgical planning application provides access to sensitive patient health information (PHI), and the user should be mindful while using the surgical planning application. The user is responsible for the security aspects of their computer.

The following section provides common recommendations about security on the web that applies to surgical planning application.

User Credentials

The surgical planning application requires users to login before accessing any data or resources. An automatic logout is configured (30 minutes of inactivity).



Each user has a unique account created when purchasing surgical planning application. Accounts and credentials shall not be shared among multiple users.

The surgical planning application uses the following security measures to protect accounts:

- User must define strong password:
 - The size of the password must be between 8 and 72 characters and include 3 out of the 4 criteria below:
 - Has at least one uppercase
 - Has at least one lowercase
 - Has at least one number
 - o Has at least one symbol (!@#\$%^&*()_+-=[]{};':"|,.<>/?).
- Accounts use multi-factor authentication:
 - The user identity is verified by sending a message, or notification, to the user's phone when attempting to login.
 - o The user's phone number is specified when creating an account.
 - The multi-factor authentication uniquely identify your device when you first enroll. If you've lost your phone, reach out to your representative, or account administrator to enroll a new device.

ATEC and EOS imaging employees do not have access to user passwords, and in any event, would never ask users to provide their password. If this happens, immediately contact your ATEC/EOS representative, or use the contact information available in the "Contact Us" section.

User Environment

The use of an auto-updated, browser is recommended.

The user must respect the common recommendations about security on the web:

- Apply security updates to the user's computer as soon as they are available.
- Use antivirus software on the user's computer.
- Download applications only from official websites.
- Don't diffuse any information, especially about application's access and patient data on social networks.
- Separate personal and professional uses.



Avoid public or unknown Wi-Fi networks.

The surgical planning application temporarily stores information on the user's computer to display information in the web-application.

Follow your organization policy to decommission the computer when no longer in use. At minimum, you must clear your browser cache and delete your user account.

User Access

The surgical planning application implements HTTPS protocol for communication between the user's web browser and the application's server. The protocol encrypts end-to-end communication to ensure confidentiality, and integrity, of information.

The user must respect the common recommendations about security on the web:

- Use only the following address to access the application: https://eos-insight.com/
- Make sure that the connection uses HTTPS protocol to access the application.
- Log out from the application after each use.

ATEC and EOS products use a trusted certificate authority to enable https. If your browser notifies an untrusted certificate when using the surgical planning application, close your browser, and contact immediately your ATEC/EOS representative, or use the contact information available in section "Contact Us" below.

The surgical planning application monitors user's connection on the web application. The security measures include:

- Bot protection: identifies if an autonomous program tries to login on the application. When triggered, an additional captcha is required on login;
- Brute-force protection: identifies if an attacker tries to multiple attempts to guess credentials. When triggered, user's account is blocked. Please reach out to your representative, or account administrator to unblock your account.

Application's Servers

The surgical planning application and the EOS Insight platform are web applications hosted and deployed on a datacenter certified for hosting Patient Health Information (PHI) and is HIPAA compliant. The surgical planning application relies on the EOS Insight platform for support capabilities such as user access control, and data acquisition access.

The main feature of the server is to protect personal health information. The server is installed in an environment that complies with the standards in force for this type of use. Moreover, the https protocol is used to connect to it, thus ensuring data transfer security.



Server(s) security and data retention is under the responsibility of the manufacturer.

The user can request the deletion of patient data from the application's server. If you want to delete data, please contact us. Contact details are available in the "Contact us" section.

Information to the User

The deployment of a new version of the device is followed by an information to the user on which updates have been performed on the device. The user has direct access to the last version of the device through the web application.

If a cybersecurity vulnerability or event is detected on the device, depending on its severity and impact on the user, a communication is performed with details on vulnerabilities and recommendations.

Report a Cybersecurity Incident

If you believe a potential security vulnerability occurred in one of our products or services, please contact us immediately. Contact details are available in the "Contact us" section.

In order to proceed with a proper investigation to initiate corrections as soon as possible, please provide at least the following:

- Contact details (name and address of the site, contact person name, function, phone number and email address).
- Device impacted (model and serial number).
- Date and time of incident.
- Any error message that has appeared.
- Any action made by the user before and after the security vulnerability was suspected.
- Any other event or source from which the security vulnerability is suspected to come from.
- Any additional information you judge necessary to understand and investigate the event.

NOTE

A PDF version of the Software Bill of Materials (SBOM) can be sent by contacting EOS imaging (see "Contact Us" section).



Product Information

Information for product identification is available from the about page of the software.

The following symbols are used on this page:

Symbol	Meaning
MD	Medical device
UDI	Unique Device Identifier
	Manufacturer
i	Consult the provided documentation
R only	Valid for the United States: Caution: Federal law restricts these devices to sale by or on the order of a physician.



Contact Us

For any questions or assistance, you can contact:

• Telephone: +1 800 9221356

• Email: eos-insight@atecspine.com

• Website: https://eos-insight.com



Appendix 1: Clearing your Browser Cache

Google Chrome

- In Chrome, at the top right, click
- Click on "More tools" then "Delete browsing data".
- At the top of the page, choose "All time" in the "Time range" drop down list.
- Check the boxes "Cookies and website data" and "Cached images and files".
- Click on "Delete Data".
- Close the page.

Edge

- In Edge, at the top right, click
- Click on "Settings" then "Privacy, search and services" in the left panel.
- In the part "Clear browsing data" click on the button "Choose what to clear".
- At the top of the page, choose "All time" in the "Time range" drop down list.
- Check the boxes "Cookies and other site data" and "Cached images and files".
- Click on "Clear now".
- Close the page.



Please read carefully the labeling provided with the medical device.

Caution: US Federal law restricts these devices to sale by or on the order of a physician.

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