Release highlights

DWOS - New features & improvements

Face scans

- Bellus3D® Dental Pro face scans are now available for view, edit, or download directly in DWOS.

- Face and bone scans are available for preview and import directly in the scan import station.

- Bone and gingiva scans can now be aligned to face scans for realistic projections of the final results of the treatment.

3Dconnexion® certified partner

DWOS and DWOS Easy Mode solutions are now 3Dconnexion certified partners. Both fully compatible with all models of the 3Dconnexion mouse devices.

Virtual articulator

The new reference occlusal plane facilitates the virtual mounting of the model.

Implant kits

Our asymmetrical implant kits have been optimized to connect to angled screw channels.

Attachment kits

- The **Display measurement** feature has been consistently applied throughout the application.

- The aspect ratio of an attachment can now be automatically preserved during scaling.

Bite splints

We have improved the way the bite splint inner compensation is calculated to avoid overlaps with the tooth scans.

Exports

Bone, gingiva, and wax-up information can now be exported as .stl files. Users can align these files with the face scans and projected restorations.

DWOS - Bug fixes

Virtual Model Builder: Removed the splinter showing on the merge. The holder of the virtual model is now correctly generated.

Manufacturing files: Fixed bug preventing the correct export of the multi-layer case files.

Full dentures: Removed frayed gingiva edges created when merging gingiva and teeth.

Synergy: Users can now fix the discrepancy between the coDiagnostiX and DWOS references by fine-tuning the implant offset and rotation.

Orthodontic Archiving: Fixed the display issue inverting upper and lower model shapes for American and Tweed formats.

Insertion axis: Fixed the bug that prevented abutments with a second layer to be grouped and applied a common insertion axis.

Easy Mode - New features & improvements

Virtual lab pan

We turned the lab-pan concept into a new feature in DWOS Easy Mode. Based on the items selected for the lab pan, lab technicians are guided step by step along the scanning process.

Contact points

We have streamlined the definition of contact points as follows:

- reduced the contact area options to better match lab requirements;
- changed the gap reference unit from millimeters to microns for accurate adjustment.

Occlusion

Defaults for the adjustment of the occlusion thickness are now expressed in microns and based on values widely used for articulating papers.

Wax-up

Wax-up adaptation has been streamlined and is now realized in one click for the entire tooth surface.

Bellus3D®

Bellus3D Dental Pro is a 3D face scanning solution used to create high-resolution 3D models of patients' faces. Lab technicians can match them with restoration simulations to visualize the impact on the patient's physiognomy. Dental Pro is available for Apple iPhone X, iPhone X and iPad Pro models. See www.Bellus3D.com for further details.

Seamless workflow between clinics and labs

Dental lab technicians can now view, edit and download Dental Pro face scans directly in DWOS if already created by dentists. This streamlines the clinic-lab communications as follows:

At the clinic, dentists scan the patient's face using Dental Pro and save it to their account on the Bellus3D cloud.

At the lab, technicians:

- access the new case in DWOS and use the case ID to check whether there are any face scans available to download;

- preview multiple face scans, download one, and align it with the proposed restoration.

Using Bellus3D face scans

You can search, view and edit face scans created with Bellus3D Dental Pro for your cases. To do so:
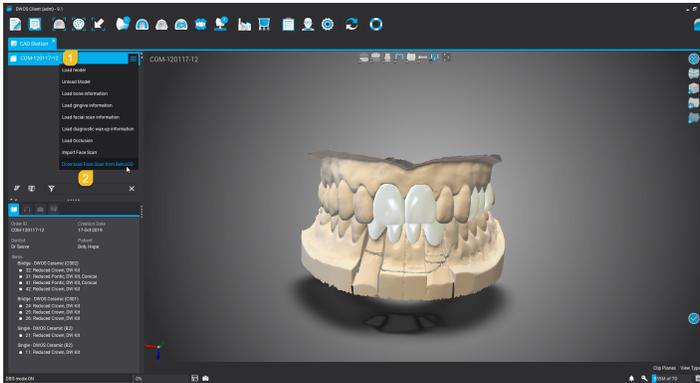
In the CAD station:

1. Right-click the case.

2. Go to **Download face scan from Bellus3D**.

All face scans associated to the current case are displayed.

You can also enter a **Username** and/or **ID** to search for other face scans.
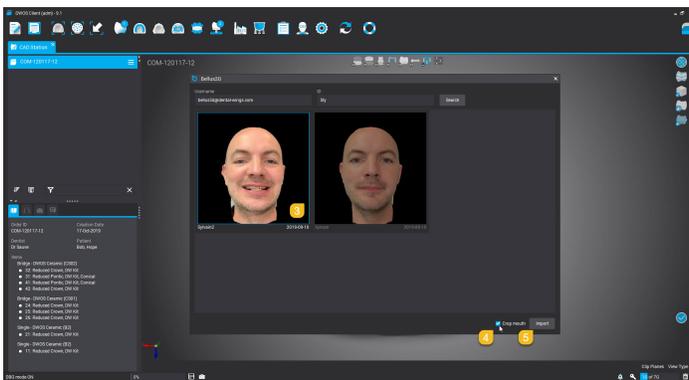
3. Click the face scan you want to import.

4. Check **Crop mouth** to prep the face scan for alignment.

5. Click **Import** to download the face scan.

Note that you can only download one face scan.

Proceed with the alignment of the model to the face scan.

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Face scans - direct import

Lab technicians can preview and import face and bone scans directly in the scan import station.

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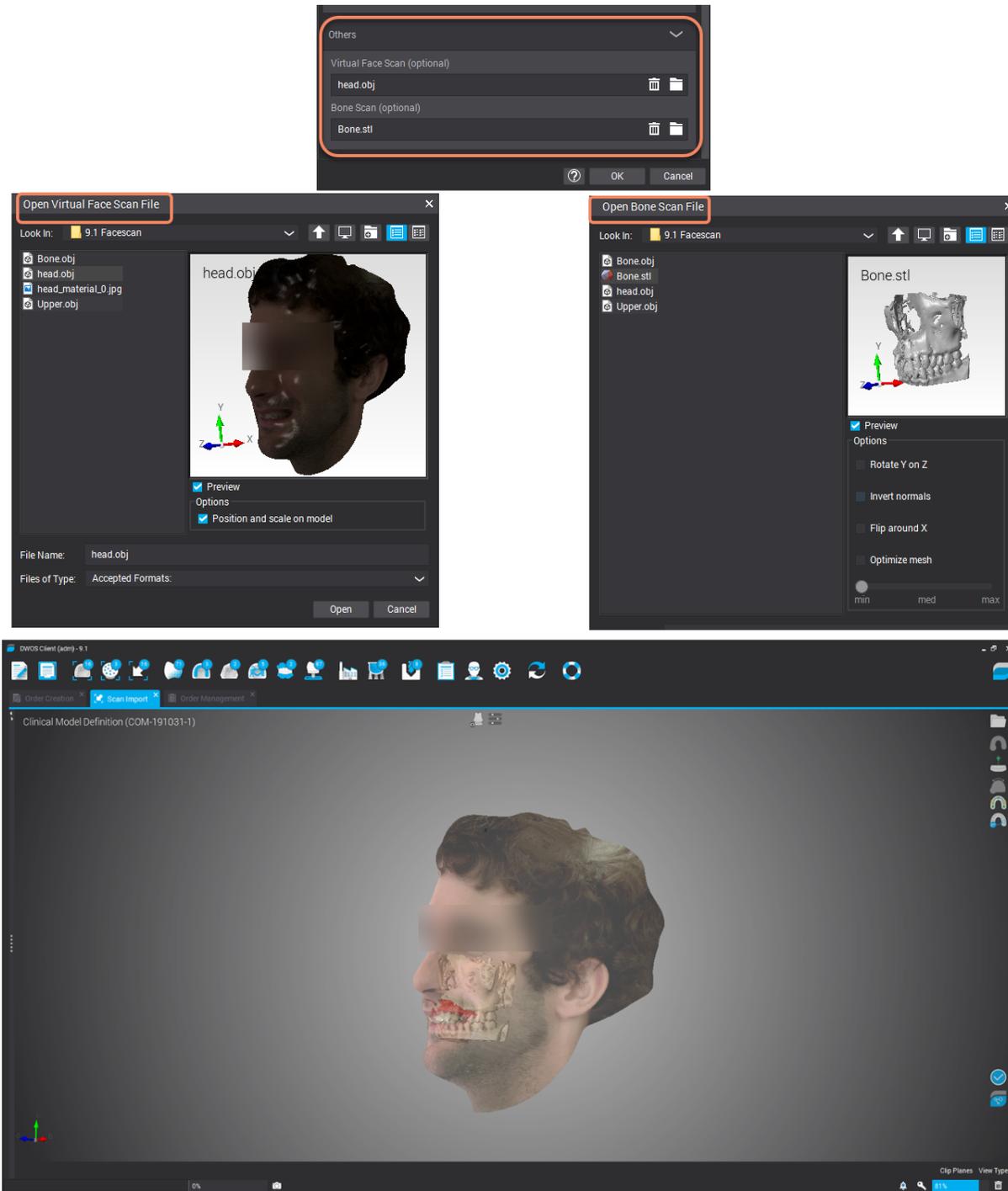
Alignment with bone and gingiva

Face scans can also be positioned on bone and gingiva scans.
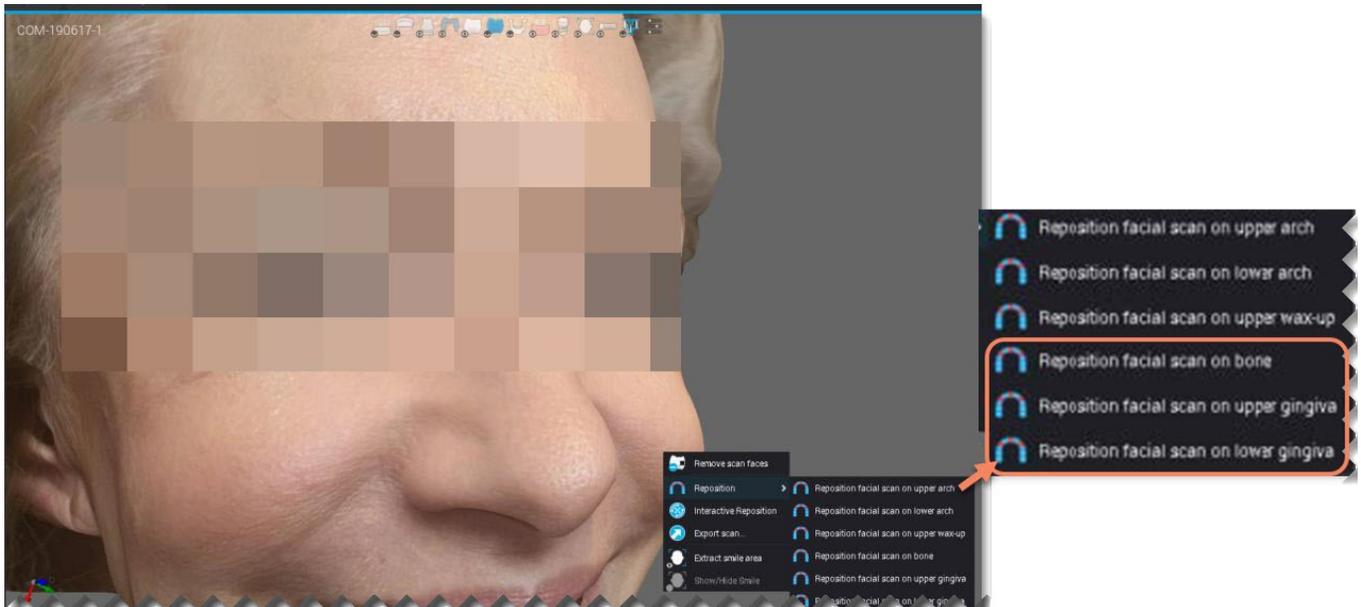
3Dconnexion®

Certified partner

DWOS and DWOS Easy Mode now support all mouses of the 3Dconnexion product lines:

- SpaceMouse® Enterprise
- SpacePilot® Pro
- SpaceMouse® Pro Wireless
- SpaceMouse® Pro
- SpaceMouse® Wireless
- SpaceMouse® Compact

- SpaceNavigator® for Notebooks
- SpaceNavigator®
- CadMouse Pro Wireless
- CadMouse Pro Wireless Left
- CadMouse Wireless
- CadMouse

The following **Design** and **Visibility** options can be configured for boosted use with a 3Dconnexion mouse:

Design Options
- Add/Remove
- Adjust contact areas
- Clinical Handles
- Edit order
- Pre-position
- Readapt anatomy
- Recompute
- Transforms

Visibility
- Anatomies
- Articulator
- Bone
- Connector
- Face Scan
- Gingiva
- Lower Arch
- Occlusion
- Overlays
- Partial
- Scan Colours
- Spacer
- Undercut Corrected Pre...
- Upper Arch
- Virtual Gingiva
- Virtual wax-up
- Wax-up

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Virtual Articulator

In an effort to translate dental articulator features into DWOS, we have implemented the reference occlusal plane, complete with the clinical positioning line and incisal point. This feature facilitates the virtual mounting of the model in the articulator.
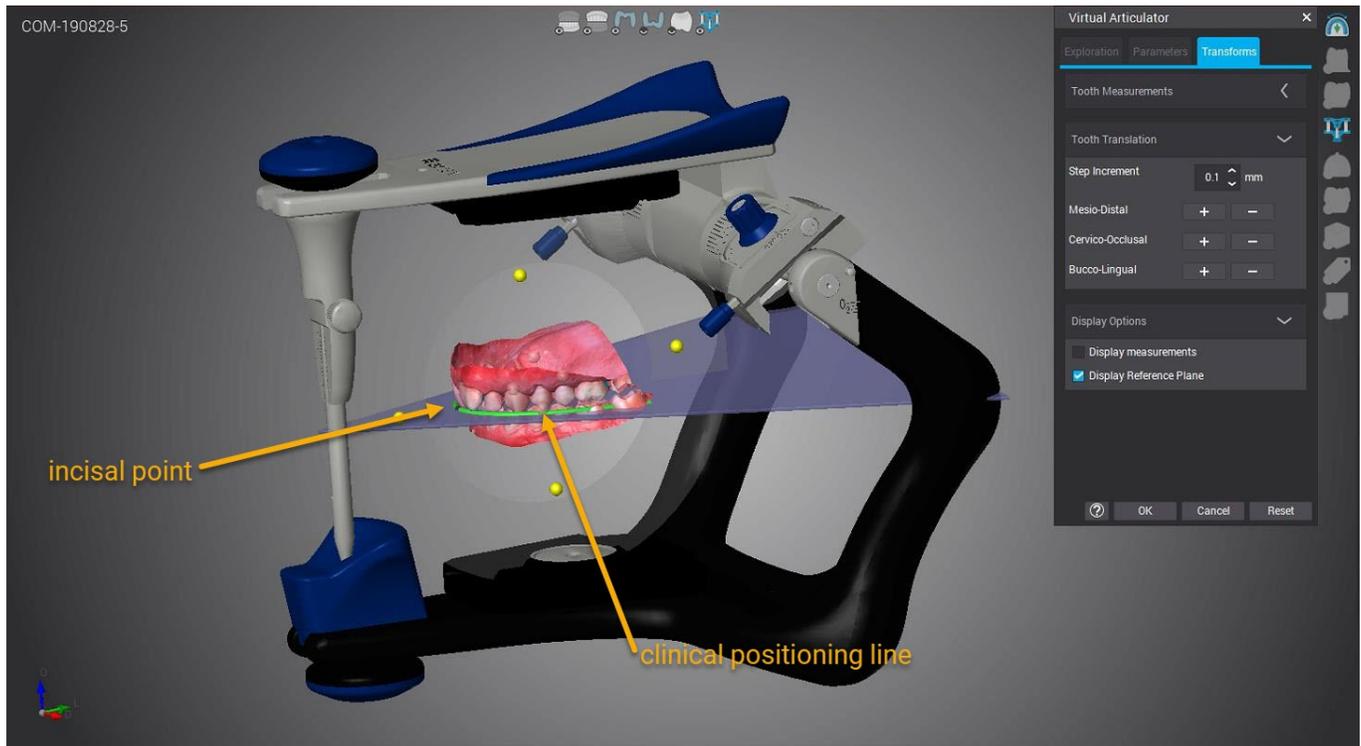
Implant kits

Non-symmetrical implants

Non-symmetrical implant kits have been optimized to connect to angled screw channels.
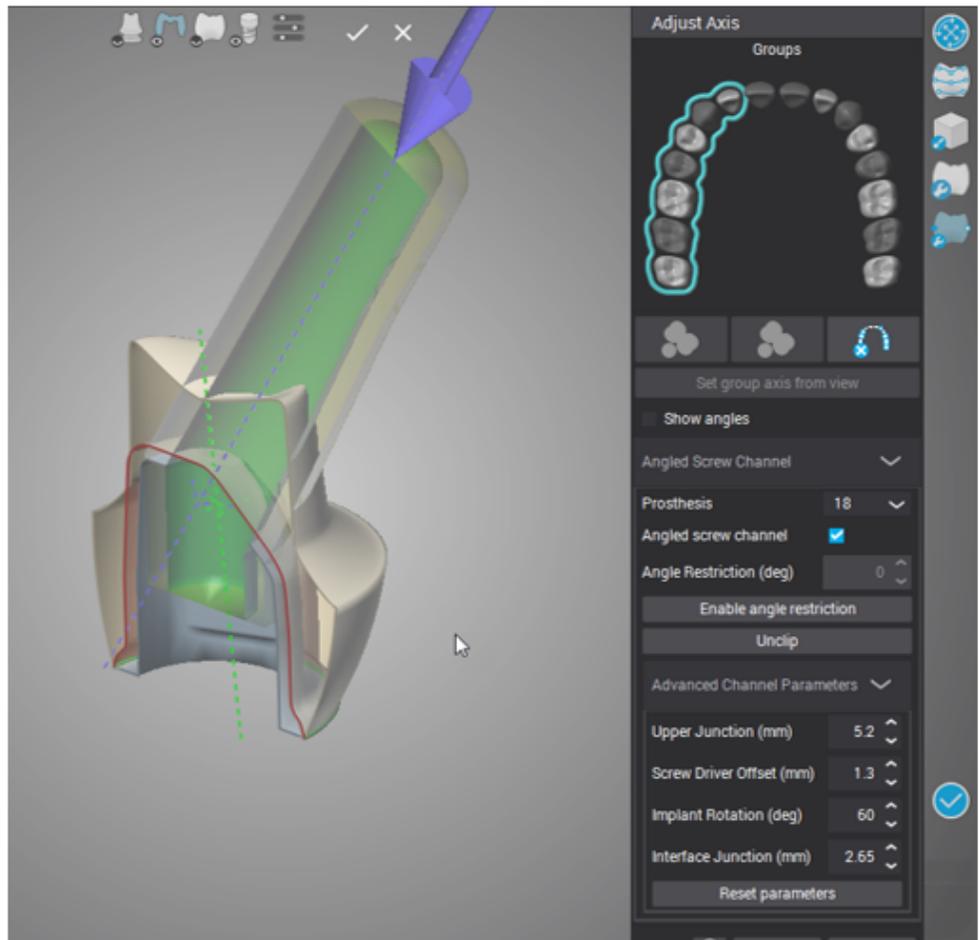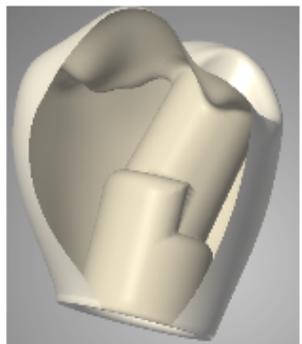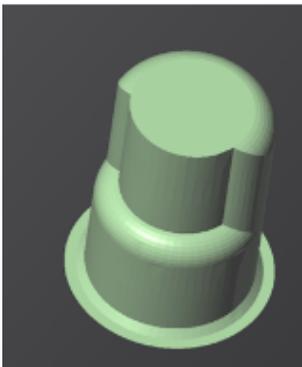
Attachment kits

1. Display measurement

This feature has been consistently applied throughout the entire application. You will be able to display measurements for all work items.

2. Homothetic Transformation

The new **Homothetic transformation** feature preserves the aspect ratio while scaling the attachment.
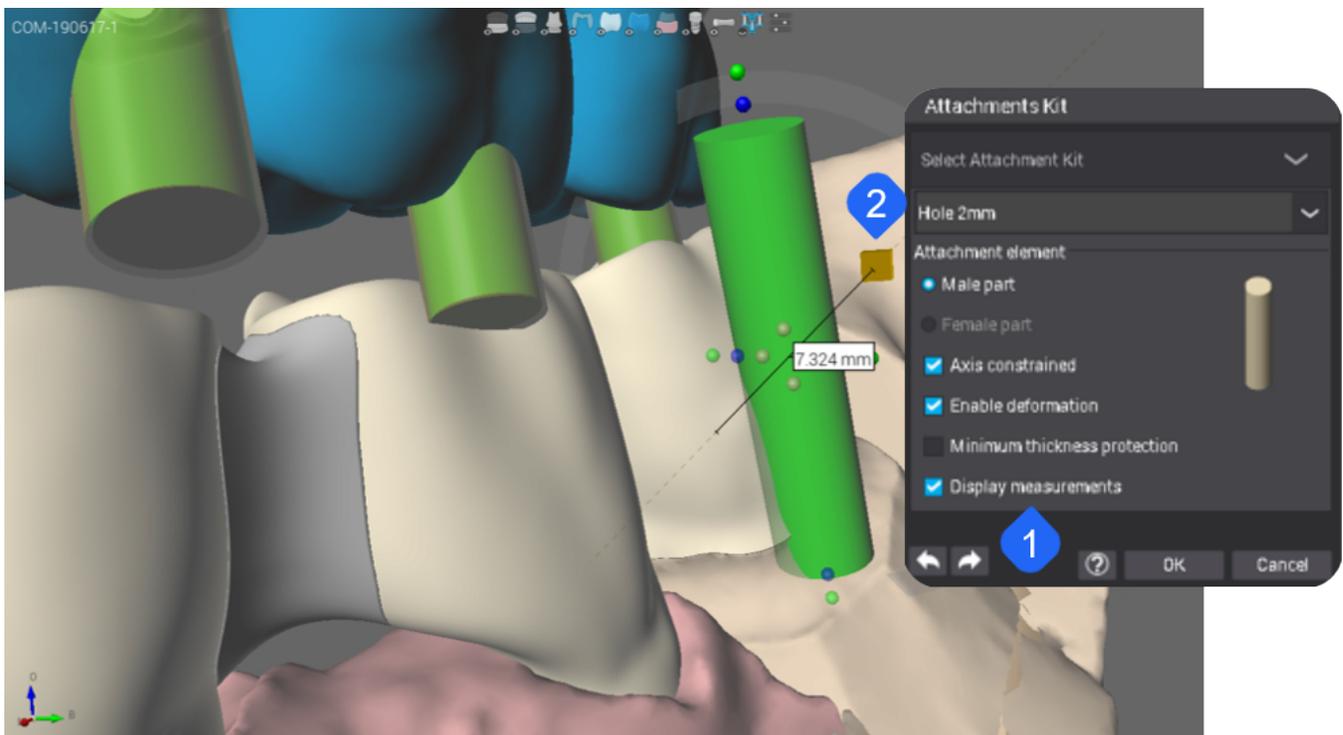
Bite splints

Inner compensation

The bite splint inner compensation follows closely the line between the teeth and the proposed bite splint.
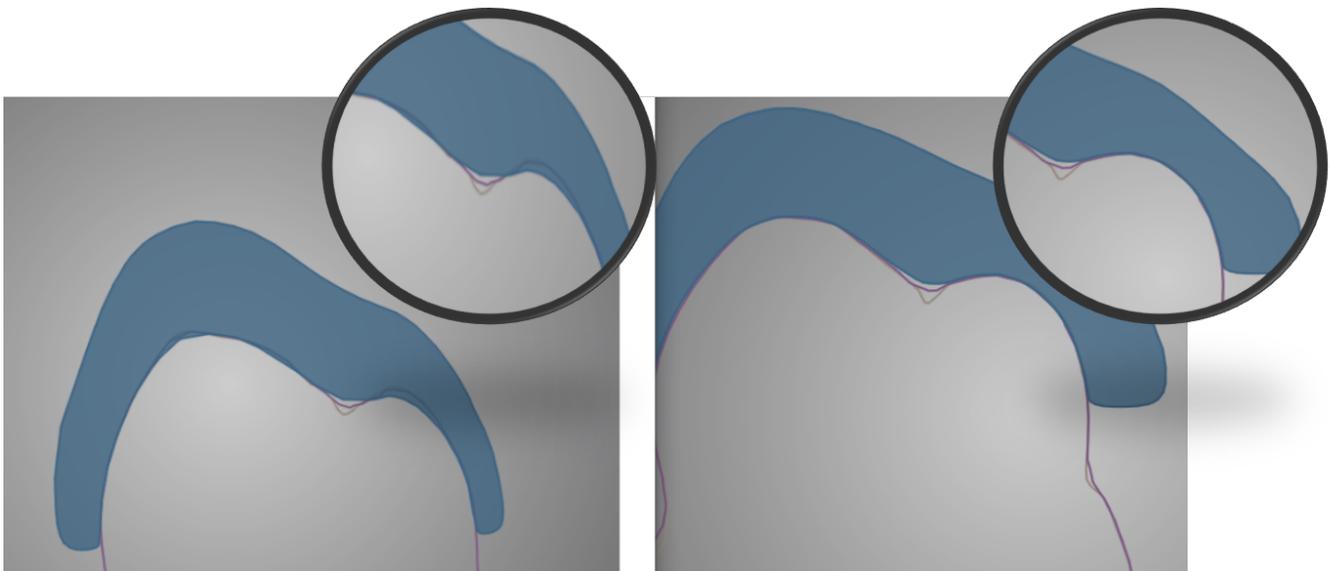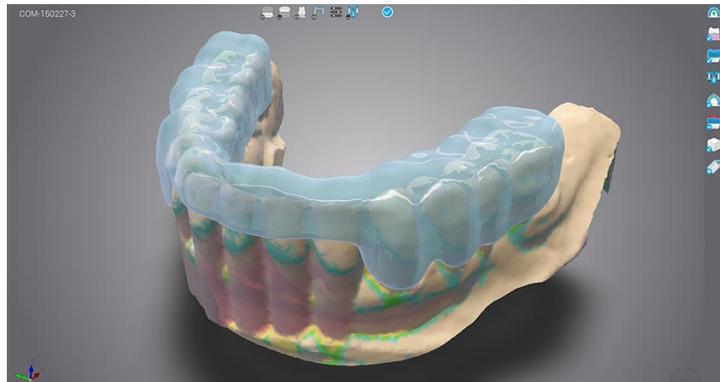
Bug fixes - DWOS

Virtual model builder

The holder is now correctly generated in the Virtual Model Builder. The splinter is no longer visible at the end of the model merge.
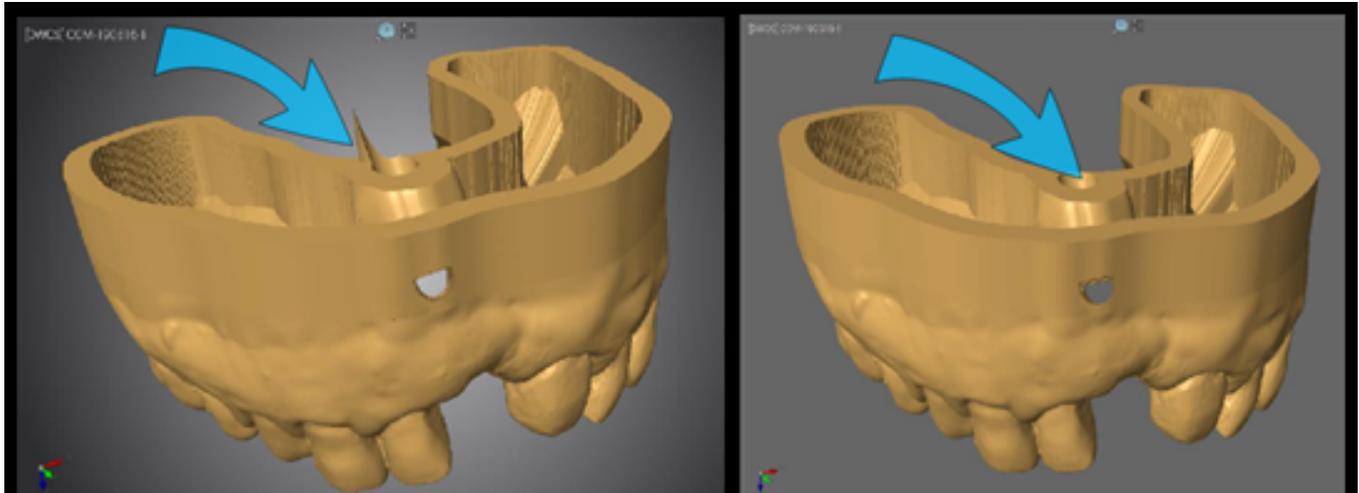
Full dentures

The teeth-gingiva merge is now correctly displayed, without the previously frayed margins.

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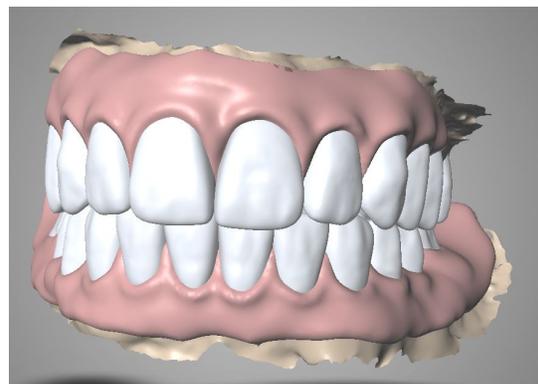
Synergy

Users can now change the offset values when importing a CoDiagnostiX case. This way, the correct coordinates are used when a prosthetic component (abutment) is used in CoDiagnostiX case planning. If an abutment is used, the height difference must be corrected.

Click the lock icon to configure Offset and Rotation values and align the planned implant with the implant kit in DWOS.
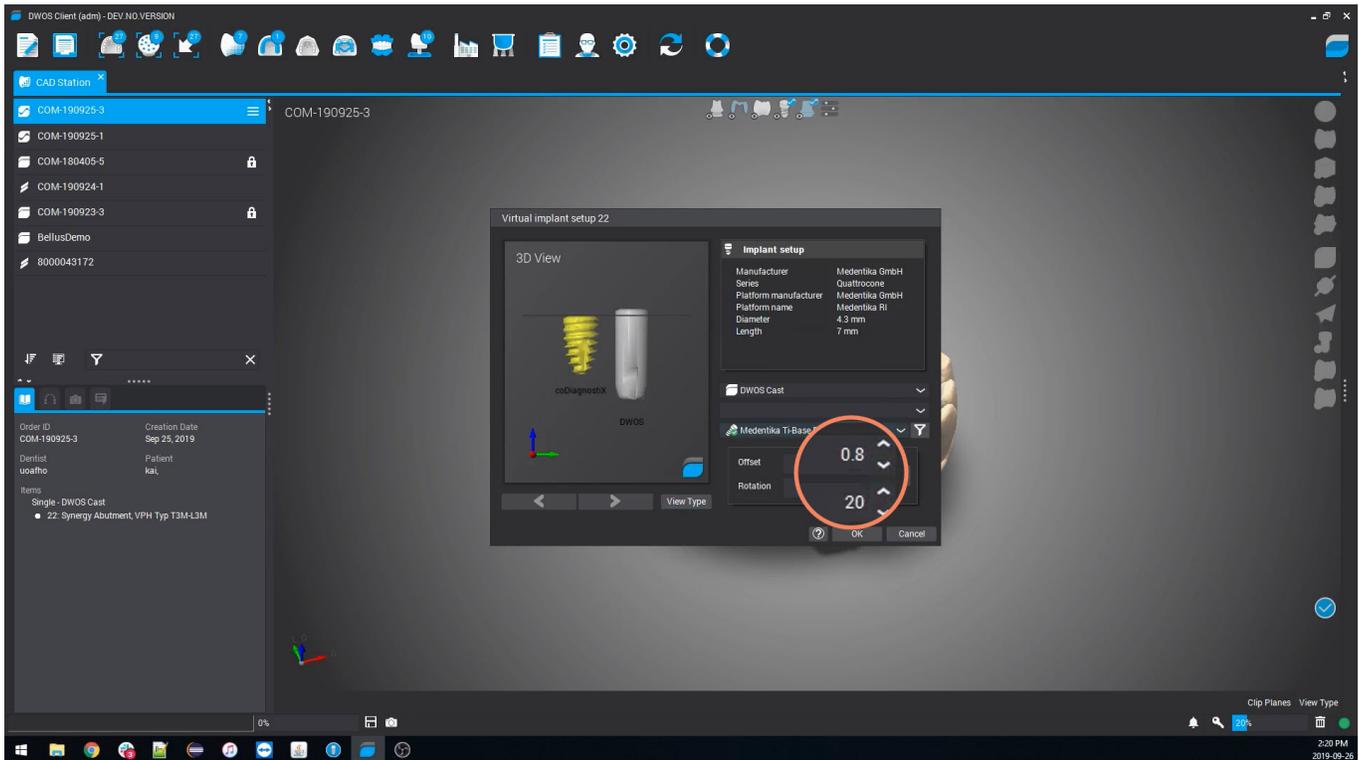
Insertion axis

Fixed the bug that prevented abutments with a second layer from being grouped under the same insertion axis.

DWOS 9.1 Release Info
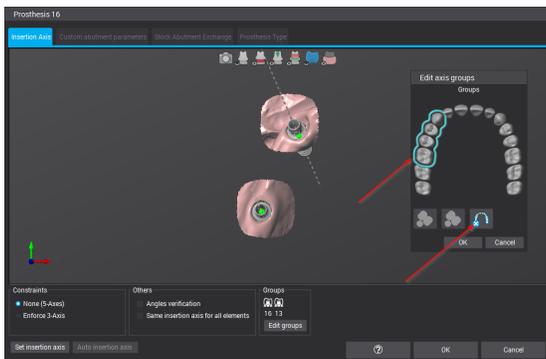
DWOS Easy Mode

Lab pan

We turned the classic lab pan concept into a new feature in DWOS Easy Mode. Users can now easily navigate through the scanning process based on the items selected for the lab pan.

Items to scan- guided workflow

When working on a new case, you can select the items you want to scan. The upcoming options adapt to the choices you make and only present you with steps related to these options. A preview of the items selected is displayed for information purposes.

Click the items to scan to add them to your lab pan.
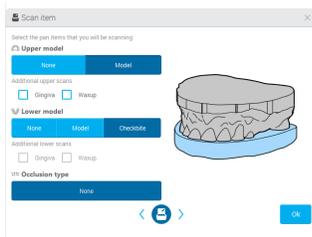
Upper-arch restorations: upper model and checkbite
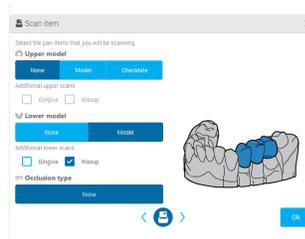
Lower-arch restorations: lower model and diagnostic wax-up

Upper-arch restorations: upper and lower models, gingiva and diagnostic wax-up

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Contact area

Contact points

We have streamlined the definition of contact points as follows:

- reduced the contact area options to better match lab requirements;

- changed the gap reference unit from millimeters to microns for accurate adjustment.
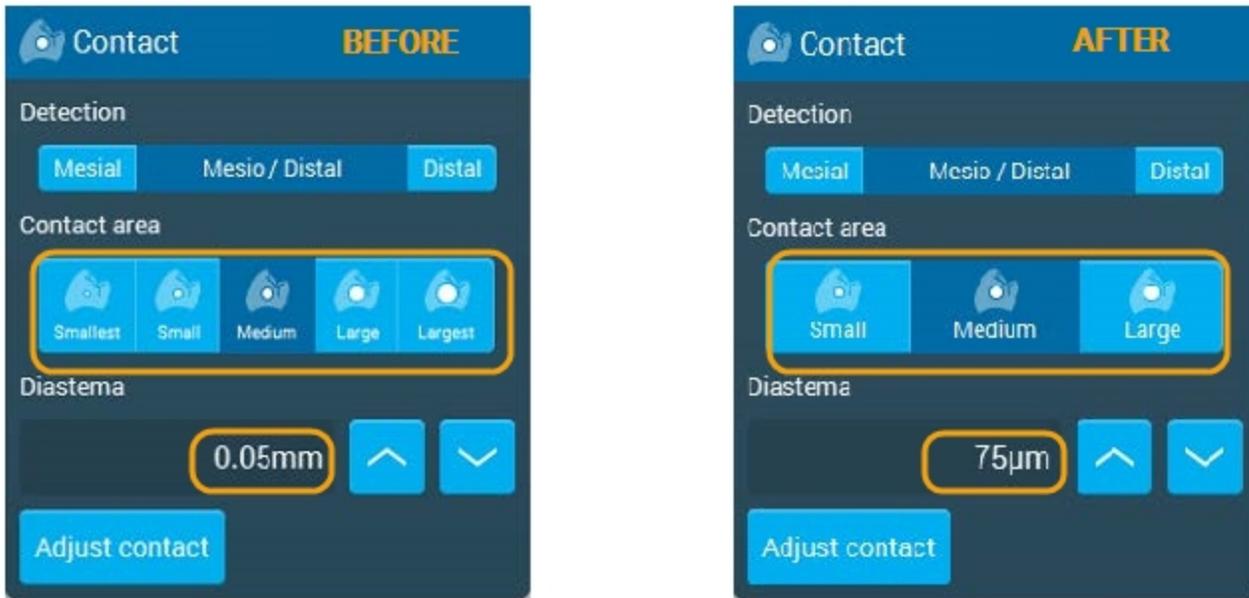
The new small, medium, and large contact areas are proportional to the restoration size.
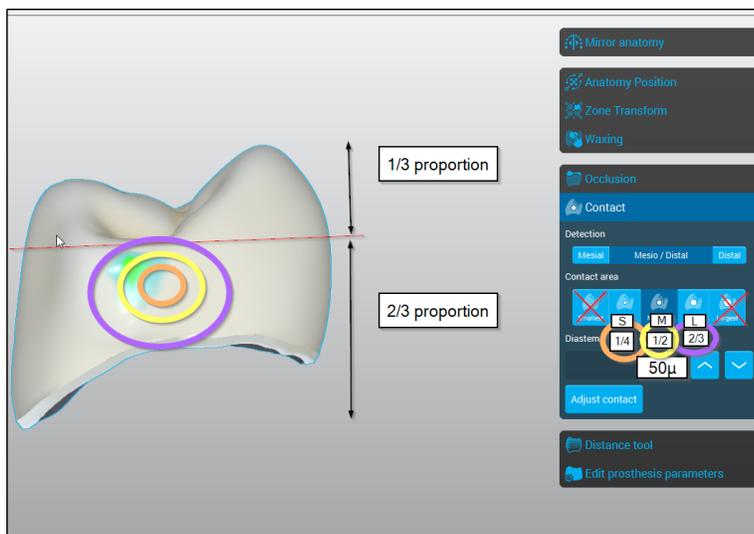
Occlusion

Defaults for the adjustment of the occlusion thickness are now expressed in microns, and based on values widely used for articulating papers.

You can validate the occlusion thickness by selecting a value from the dropdown list.
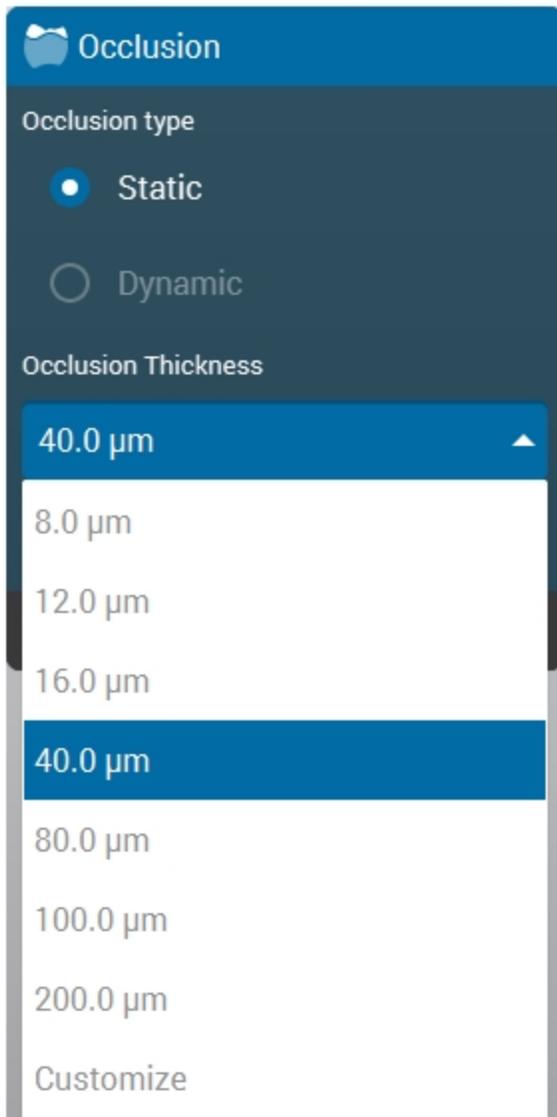
Note that you can also customize the thickness value depending on your specific requirements.

DWOS 9.1 Release Info / v.1.0