



DWOS Synergy™

An **Implant CAD** license is required for using this feature

DWOS Synergy™ is an implant planning collaborative tool that enables taking into account the prosthetic outcome at the same time as the implant positioning, and the incidence these 2 aspects have on each other, by setting a real-time connection between a DWOS user and coDiagnostiX™ user.

It is a very efficient way to collaborate with the surgeon on the implant planning :

- Easy configuration and visualization
- Combine the restorative and surgical expertise prior to surgery
- Synchronous and asynchronous teamwork (automatic syncing when the order is loaded and designed even if your partner is currently not working)

DWOS Synergy™ operates by connecting to a local network or to the internet.

Connect to local network:

1. Request a DWOS Synergy™ setup package from Dental Wings support.
2. When you receive the .exe file, run it. Follow the instructions in the installation wizard.
3. Once this is installed, the application automatically detects potential coDiagnostiX™ partners who are connected to the same local network.

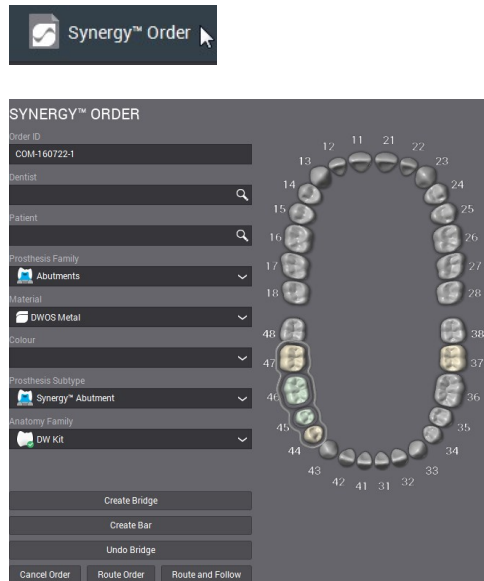
Connect to global (online) network:


1. Open **User Preferences** from the top menu bar.
2. Click the **Connections** tab.
3. Click the + sign in the **Connections** section and select **Synergy™ Connection** in the pop-up menu.
4. Fill in the form with:
 - screen name (this is how you will appear to your partners)
 - a valid email address
 - a password specifically for your free DWOS Synergy™ online account
5. Click the **Register/Login** button. Your connection remains active until you click **Logout** in this same window. Once it is created, you can log in to this account from this same dialogue.



Order Creation

Create a Synergy™ order



1. Enter Dentist and Patient names
2. In the *Prosthesis Family* menu select *Abutments*.
3. Select the foreseen material for the abutment. This will activate a particular set of parameters for the prosthesis design, but it can be change later in the process.
4. In the *Prosthesis Subtype* menu, select *Synergy™ Abutment*.
5. Select an Anatomy kit for the automatic prosthesis proposal.
6. Select the tooth numbers where it was decided to place the implants. The tooth number in DWOS has to match the tooth number of the coDiagnostiX case.
7. If you are designing a bridge, select Pontics in the *Prosthesis Family* menu, select a subtype and a shape, then select the tooth numbers for the pontics. (If you need more information for choosing the appropriate pontic, click the help icon .) Reselect all components of the bridge, abutments and pontics, and click *Create Bridge*.
8. Route the order.

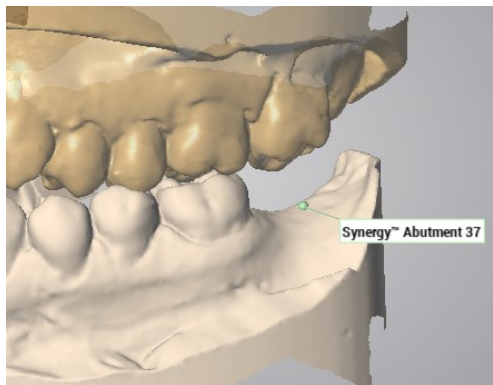
Scan

1. Drag the order in the Arch Scan station.
2. Scan the model following the side icon toolbar: start with the arch which will have the implant(s), define the area of interest, assign tooth number for the coDiagnostiX abutments, scan the antagonist arch (optional), and occlusion key (optional, if requested).
3. It is not mandatory to precise-scan the implant location and to draw a margin. These icons can be

ignored: 



4. Exit the scan station.



Completed scan session of a lower arch, defined emplacement of the coDiagnostiX™ Abutment, Occlusion key (not displayed) and opposing arch.

CAD station + Synergy™ session

When you drag a case with a Synergy abutment into the design station, the DWOS Synerg workflow is initiated and a dedicated toolbar is displayed on the side. The icons of this toolbar are described below:



When you click the first icon, the connection panel displays all available connections.

Connect to local network



1. All coDiagnostiX™ stations connected to the same local network are listed in this dialogue **1**).
2. Click on the partner you want to connect to.
3. Your coDiagnostiX™ partner receives the case and must match the DWOS surface scans with the bone structure scans.

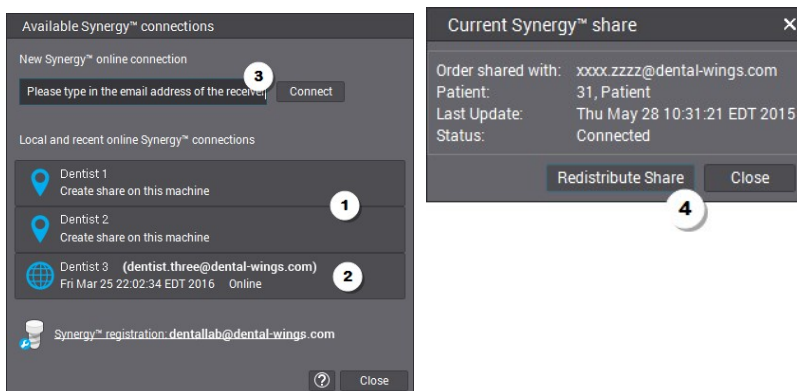
Connect online



- The most recent online connections are displayed if they are still valid **2**). Click on this connection to activate it.
- If you want to connect to a new online partner, enter their email address in the field **3**). It must be the same email address that was used to create their DWOS Synergy™ account. Click the **Connect** button next to the field.

Change partner

Use the **Redistribute Share** button that appears in this dialogue when a connection is made with a local or online partner **4**).

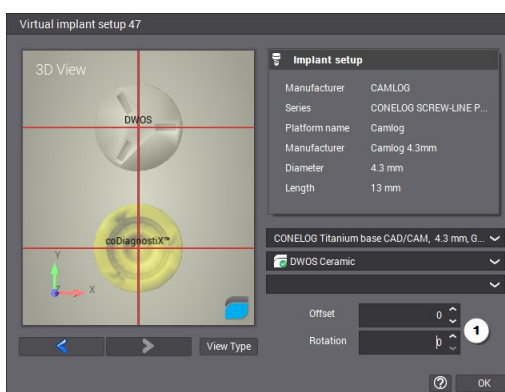
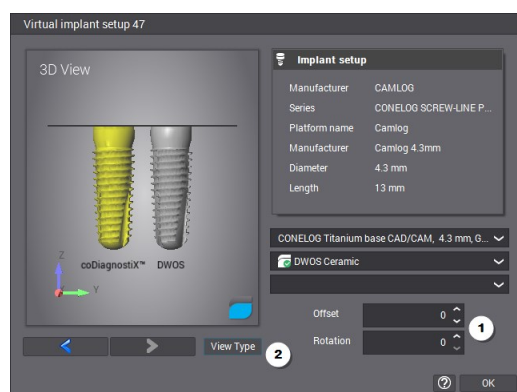


Implant Setup

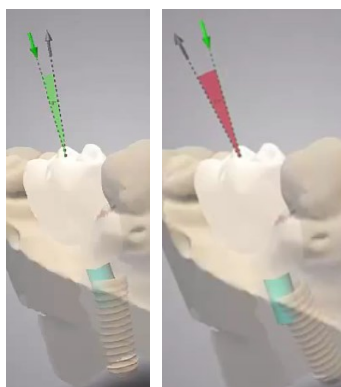


In order to make the collaboration possible, the DWOS *implant kit library* must contain the kit for the implant, which is used by the coDiagnostiX™ user. It is the responsibility of the DWOS user to import it, if not already there. This is done in the [Implant kit editor](#).

1. Once your partner has chosen or changed an implant kit, you receive a pop up dialogue: *Virtual Implant setup*.
2. This window opens for you to match the implant from your implant kit library to your partner's implant.
3. If necessary, you can apply an offset and a rotation to match their position.
 - Change the *View Type* 1) to match the position in every direction.



You can visualize the implant axis that the coDiagnostiX™ user is defining. Then you can adjust the prosthesis axis accordingly with the insertion axis function, found in the right-click menu > Recompute. When the divergence angle exceed what is allowed by the implant kit, the angle is displayed in red and you will not be allowed to continue with it.



Connect



When shaping tools are used on the prosthesis, the remote live connection may cause some delays of the display refresh. This button can be used to temporarily interrupt the connection so that the prosthesis customization can be done without undue delays.

1. Click to disconnect.
2. Edit the prosthesis.
3. Click to reconnect, and a complete update is automatically sent to your share partner.

Send



Use this icon only if, during a live session, you have edited the **order** or the **computing parameter** and you want to share these changes. The synchronized session will continue.

Note that synchronization is always automatic when: 1-Modifying the prosthesis with the multi-designer, 2-loading an order, 3- closing the CAD station, 4-exiting the DWOS client. You don't have to use this button in these cases.

Convert the abutment



Upon consensus on the implant planning, the same order is used for the prosthesis manufacturing. It just needs to be converted into the appropriate type of custom abutment, or into a gingiva former.

Click the **Edit prosthesis type** icon to display the prosthesis window. The available prostheses are restrained by the material that was selected in the **Virtual Implant setup** window.

This function can also be used to revert to a Synergy™ abutment.

Custom abutment with waxing

When an element of a bridge is converted into a **Custom abutment with waxing**, all components of this bridge are automatically converted as well, and a [virtual waxing](#) is automatically computed for the full bridge span.



Update prosthesis



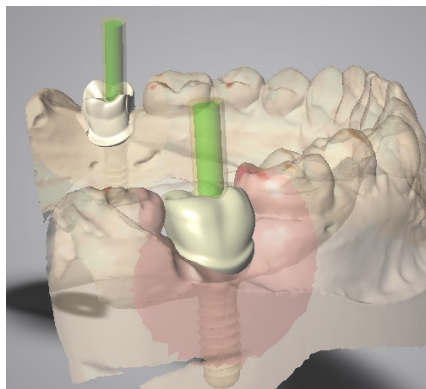
When the coDiagnostiX™ user changes the implant position, click this icon to recalculate your abutment with the new implant position.

Exit



When the implant position is finalized and the prosthesis converted into the restoration that needs to be fabricated, then you can exit the CAD station.

1. The prosthesis is merged.
2. Click the exit button again.



Merged view before exiting the CAD station

Troubleshooting

Validation fail

These notifications could appear when trying to merge the prosthesis and exit the CAD station.

