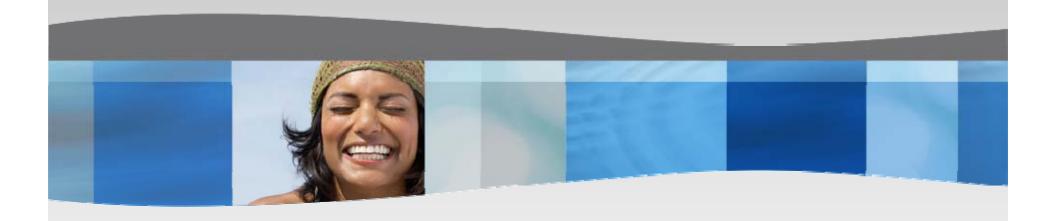
What's New in iTero Scanner 4.0







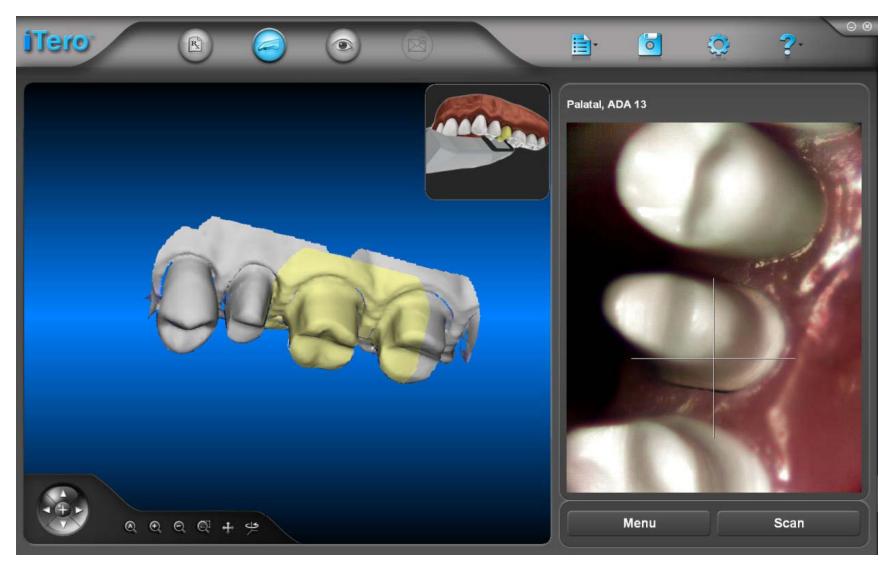
New User Interface

- iTero has a new user interface with a completely new look and feel.
- The new user interface is designed to:
 - Maximizes the use of available screen space
 - Enhance visualization of the 3D model
 - A more intuitive user interface
 - Improve case workflow





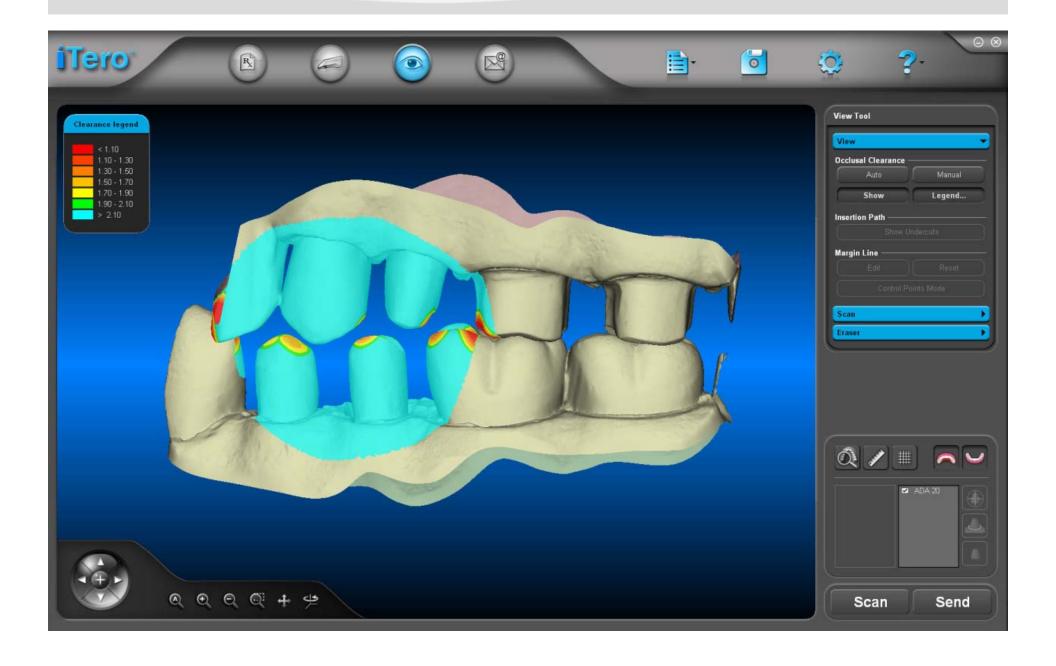
New User Interface





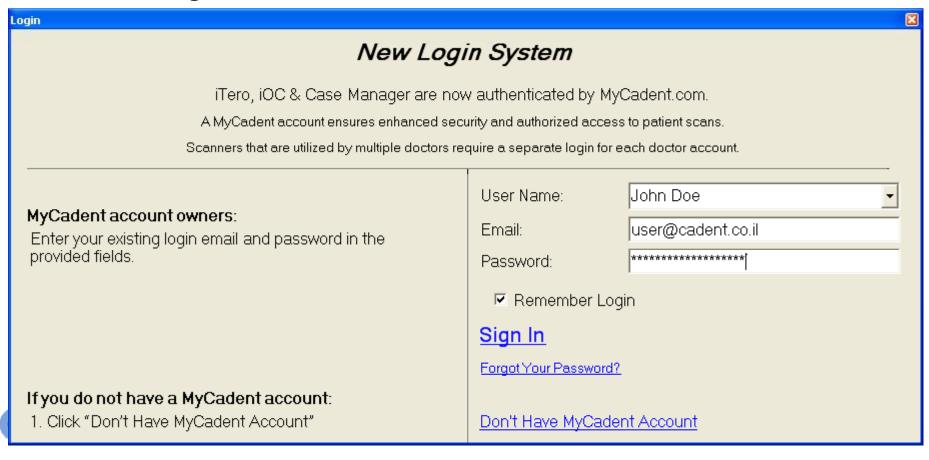


New User Interface



Login

- Login into iTero/CM is now done with MyCadent accounts
 - Select your *User Name*
 - Enter your *Email* and *Password*, as you do in MyCadent
 - Press Sign In



Login

- On selecting *User Name*, if user had a previously successful login:
 - Email field will be filled automatically
 - If Remember Login was checked previously, Password field will be filled automatically
- If you do not have an account in MyCadent, you can create one using the login dialog.
 - Press **Don't Have MyCadent Account** and the dialog will display additional options.
 - Select your name from the *Username* drop-down list.
 - Press Create Account.
- Legacy login style will still be enabled for a while
 - Select your *User Name*
 - Press **Don't Have MyCadent Account** and the dialog will display additional options
 - Press Skip Login





Goals

- Real time buildup and visualization of the 3D model
- Doctor sees a high quality 3D image (merging, hole-filling)
- Simplify capture of the margin area in multi-unit cases

•Rx

- Same case types, but scanned in RTM mode
 - Quadrant (RTM)
 - Expanded (RTM)
 - Full arch (RTM)
 - Reference Model (RTM)
- Rx enables user to choose scanning order
 - Prep jaw first or opposite jaw first
 - Prep tooth first or arch first.





Scan Tool

- Scanning divided into segments
 - For example Quadrant (RTM) has 7 segments:
 - Lower Buccal and Lower Lingual
 - Upper Buccal and Upper Lingual
 - Prep Tooth and Prep Tooth Contacts
 - Bite
- User is guided through the segment, as in previous scanning protocols
 - Scan positions are updated quickly after each scan is taken
 - Unregistered scans are shown at the top in a red frame
 - Additional operations are available through the left pedal menu
 - Next to advance to the next segment
 - Undo to delete the last scan that was taken in the current segment
 - Rescan Segment to delete all scans in the current segment
 - **Prev** to return to previous segment
 - Delete Unregistered to delete all scans that have not registered successfully
 - View to enter the View Tool
 - There is a limitation of maximum number of scans per segment
- When scanning of a segment is finished
 - User should wait until all registration is finished or until registration fails
 - User can use Next to move to the next segment or Add Scans if more scans required System will Add Scans automatically if a scan has failed registration
- User is responsible for capturing all necessary information
- Unregistered scans are deleted upon leaving a segment





Scanning of Prep

- The goal is to capture the margin area and the entire preparation
- Scans should be taken immediately after the cord is pulled out
- In multi-unit cases, each prep tooth is scanned separately
- User should take as few scans as possible
- In case of prep first, we reuse prep scans to build the arch
- Color overlay is shown only on the first prep scan, and only when no other scan is visible
- During scanning, prep scans are displayed in high resolution. All the rest are displayed in preview resolution.
- Contact scans (interproximals) participate in both prep model and arch model
- Automatically spin the model for review at the end of a prep segment

Prep Occlusal Clearance

- Can be calculated and shown if user scans Opposite Jaw First
- After the prep is scanned, the left pedal menu will contain Occlusal Clearance
- Upon choosing this command
 - User will be guided to take bite scan
 - Bite scan will be registered
 - Occlusal Clearance will be computed and shown
- If needed, doctor can reduce the prep tooth some more and then go back and rescan it





View Tool

- Multiple Merge surfaces in RTM View Tool
 - Special visualization of preps with arches
 - Buttons to Zoom on active prep tooth, show it separate

- Prep Registration

- If the prep is not registered to the arch a pop up window will ask for assistance to register the scan segments
- The process is performed by clicking the general prep location within the arch to assist registration
 - To prevent this, it is important to follow scanning guidelines:
- The buccal and lingual scans have to be captured parallel to the arch, and at a tilt of 45 degrees.
- The tip of the scanner should always be pointed to the distal of the current segment.

Eraser Tool

- User can erase an area on a single merge surface, either arch or prep, and fill it by a single scan or more
- Note: These scan(s) will only fill the erased area without affecting surrounding surfaces

- Sending of RTM model

- RTM model can be sent only if all preps stitched to arches and merge was successfully performed on all surfaces
- By sending the RTM model, doctor approves the quality of sent model





Many scans don't stitch, inside a segment:

- Take a scan with large overlap to the last successful scan in the segment.
 - To achieve more overlap, the scanner tilt and orientation are also important not only the cross position. You want to tilt and orientation of the scanner to be close to that of the previous scan, in order to guarantee registration success.
- If you reach the maximum allowed number of scans, use *Delete Unregistered* to continue trying.
- If adding scans with overlap doesn't help
 - Use *Rescan Segment* and start over
 - It makes sense to do so, because it is possible that one of the successful scans is bad (e.g. distorted, or taken from the wrong side of the mouth), therefore adding scans will never succeed
- Do not use **Next**
 - Modeling will not be able later to fix these problem for you
 - If you do, all scans that didn't stitch will be deleted, and you will have to rescan them later





- None of the Lingual scans stitch (Buccal side scanned)
 - Take an occlusal scan of a posterior tooth
 - This increases the overlap with the buccal side
 - In *Expanded* cases, this may happen on the side of the jaw where you only need to scan anteriors (up to cuspids)
 - The lingual and buccal views of the cuspid do not have enough overlap
 - Take an occlusal scan of the cuspid
 - If this doesn't help, tilt the scanner more towards the buccal side until it succeeds
 - If you reach the maximum allowed number of scans, use *Delete Unregistered* to continue trying
 - If nothing works, try to see whether the buccal scans are OK
 - If you suspect that they might contain wrong data, go to the buccal segment and use *Rescan Segment* to rescan the buccal side
 - Do not use **Next**
 - Modeling will not be able later to fix these problem for you
 - If you do, all scans that didn't stitch will be deleted, and you will have to rescan them later





- Jaw sides (right and left) do not stitch together
 - Make sure that both segments (right buccal and left buccal) contain information of the centrals
 - Add scans to one of these segments if it doesn't
 - Continue scanning the lingual sides (right lingual and left lingual)
 - There is a good chance that the system will succeed in stitching right-left based on lingual scans
 - If problem persists, try to scan an area that is common to both sides
 - Add a scan of both centrals in the right lingual segment
 - Make sure it stitches
 - Add scans until it succeeds
 - Move to the left lingual segment and add a similar scan there (showing) both centrals)
 - This creates two scans, one in each side, that have a large overlap
 - If you reach the maximum allowed number of scans, use **Delete Unregistered** to continue trying
 - You are responsible for connecting the two sides

 - Modeling will not be able later to fix these problem for you
 If you use *Next*, you will not lose any data, but the jaw will not be merged
 - You will need to add scans later in order to connect the two sides





Failed to capture some part of the prep tooth

- Add scans in that area, each time trying to capture the tooth from a different viewing angle
- If this is a small area which doesn't include the margin
 - Consider to postpone this, and later use the Eraser Tool
 - It will treat only that area without risking the quality of the margin
- If you reach the maximum allowed number of scans, use **Delete**Unregistered to continue trying





- Failed to capture the incisal edge of a tooth, where the scanner is touching the tooth.
 - This is the result of a dirty sleeve. Try to clean it (or replace it)
 - Try to take a scan of that area from a slightly different viewpoint, such that the scanner doesn't touch the tooth
 - If it doesn't work, it is also OK to postpone the capture of these areas
 - Sometimes scans from another side (lingual/buccal or left/right) will eventually capture the missing area
 - Consider using the Eraser Tool for fixing the problem
 - When taking the "filling" scan after marking the eraser, try not to touch the incisal edge of the tooth





Merged Model contains unwanted surfaces

- These surfaces can be caused by lips or tongue touching the teeth during the scan of that area
- Use the Eraser Tool to fix the problem locally
 - This is the purpose of this tool





Miscellaneous

Scan Bodies

- Teeth that were defined as Scan Body will be represented in the tooth table of the Rx dialog as 2 rows:
 - The first for the Custom Abutment that will replace the Scan Body
 - The second for the Crown that will be built on top of the Custom Abutment
- These Rx fields are all optional.

File Attachment

- Users can attach a file to the iTero case. At most one attachment per case is allowed.
- The attachment can be used, for example, for additional Rx infowhen ordering a Custom Abutment.
- The attachment UI is at the bottom left of the Rx dialog:

