Simplant®

CBCT to Simplant®

- Export protocol for Morita

Dentsply Sirona Implants

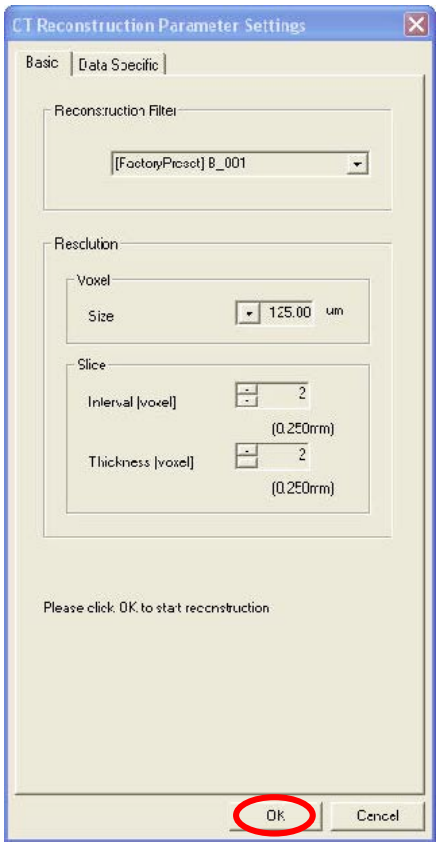
This protocol gives a detailed description of the steps to be followed for exporting your Morita scan images in DICOM format and for importing these in Simplant. This protocols aims at an optimal visualization of your images in Simplant but does not guarantee easy segmentation.

Part 1: I-Dixel software version 1.74

1. Start up the I-Dixel software version 1.74
2. Select 'Import/CT/CT data' in the File menu, browse to the folder where your scan data is saved and import the data in I-Dixel
3. Click the 'Recon.' button on the CT toolbar



   a. A reconstruction filter can be applied



We recommend the B_001 and B_102 filters with a voxel size of 125µm, a slice interval of 0.250 mm and a slice thickness of 0.250 mm. Both filters give a good visualization in Simplant.

   b. Click 'Yes' to save the CT task.



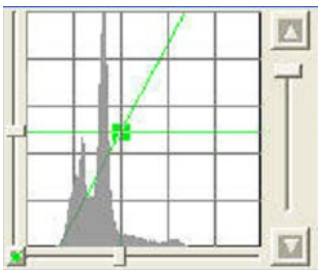
4. Adjust the contrast by using the Histogram window.
    a. This tool can be activated in the View menu/histogram or by clicking the histogram button in the general toolbar.



    b. Adjust the green line of the histogram as follows:



By default it covers more than only the histogram range. It should be adjusted such that it completely covers the histogram range (like in the figure below). This way the contrast will be optimal in Simplant.



The way the contrast is changed in the figure below is not correct; the green line does not cover the complete histogram range. The contrast in Simplant will not be acceptable.



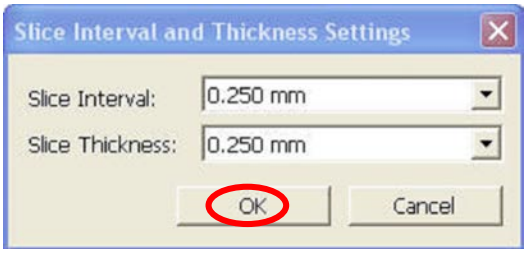
5. Click ‘SliceAgl”



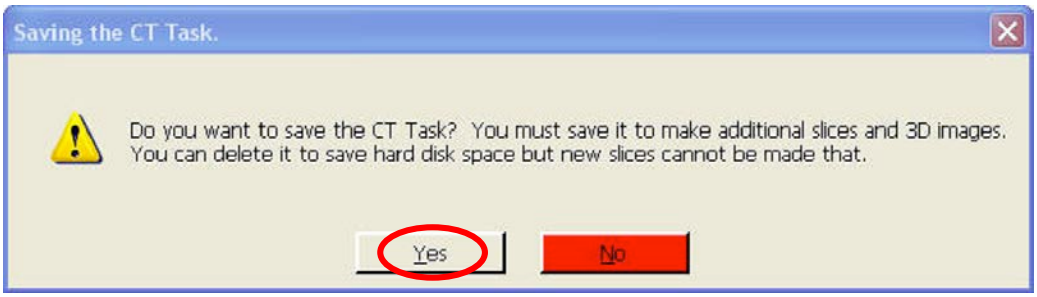
6. Click ‘Slice’ button



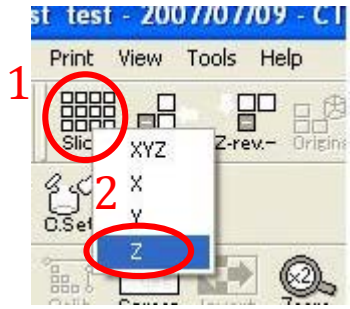
   a. Select 0.250mm as slice interval and thickness



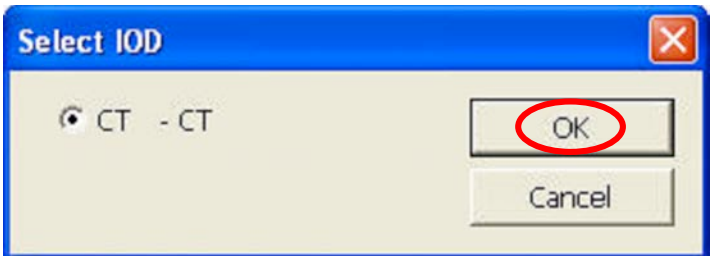
   b. Click ‘Yes’ to save the CT task when the slicing is finished



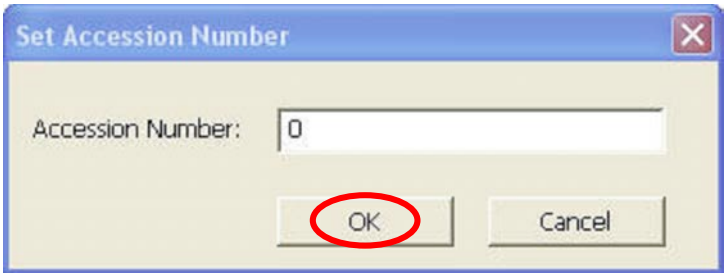
7. Click the ‘Slices’ button and select ‘Z’ in the dropdown



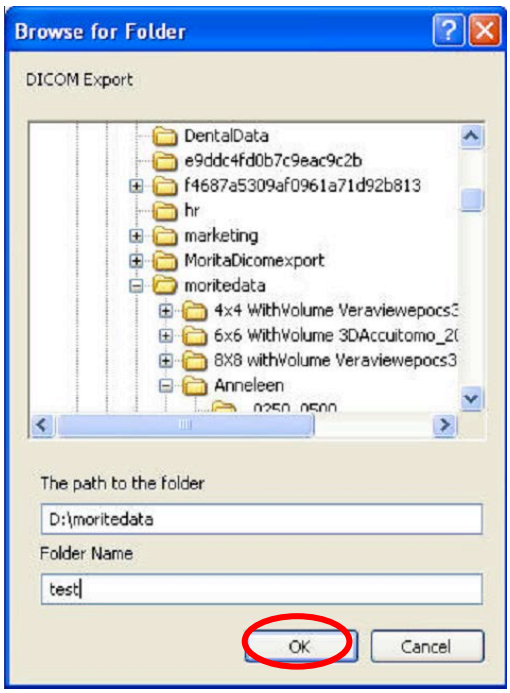
8. Select ‘DICOM storage/ Save as file’ in the Patient folder menu
    a. Click ‘ok’



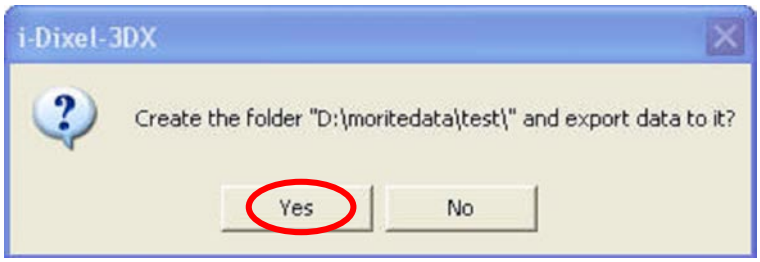
    b. Click ‘ok’



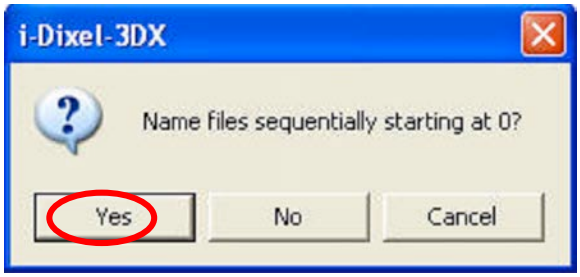
    c. Choose a destination folder where you want to export the DICOM images and specify a Folder name



d. Click ‘yes ‘to create the folder



e. Click ‘yes’ to start exporting the dataset

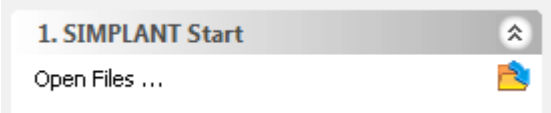


f. Click ‘ok’. Your dataset is exported and the DICOMs can be found in the folder you specified.

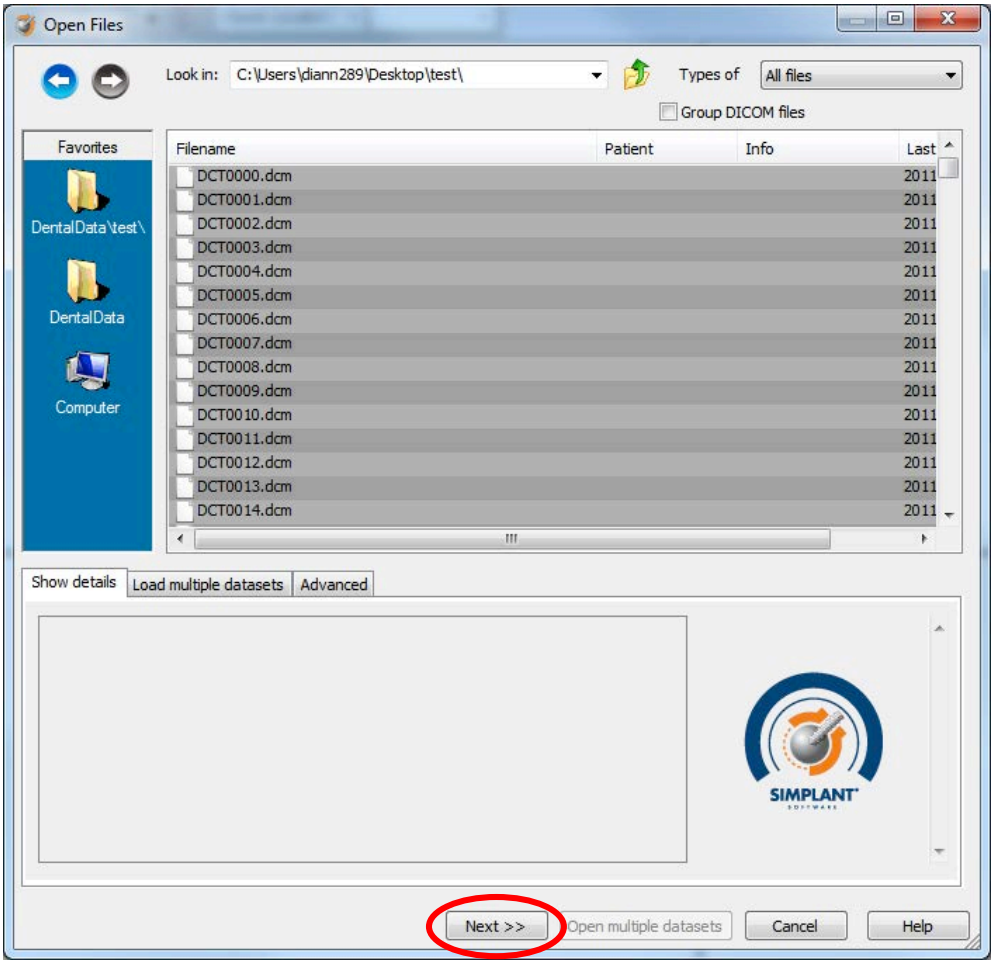


Part 2: Simplant® software

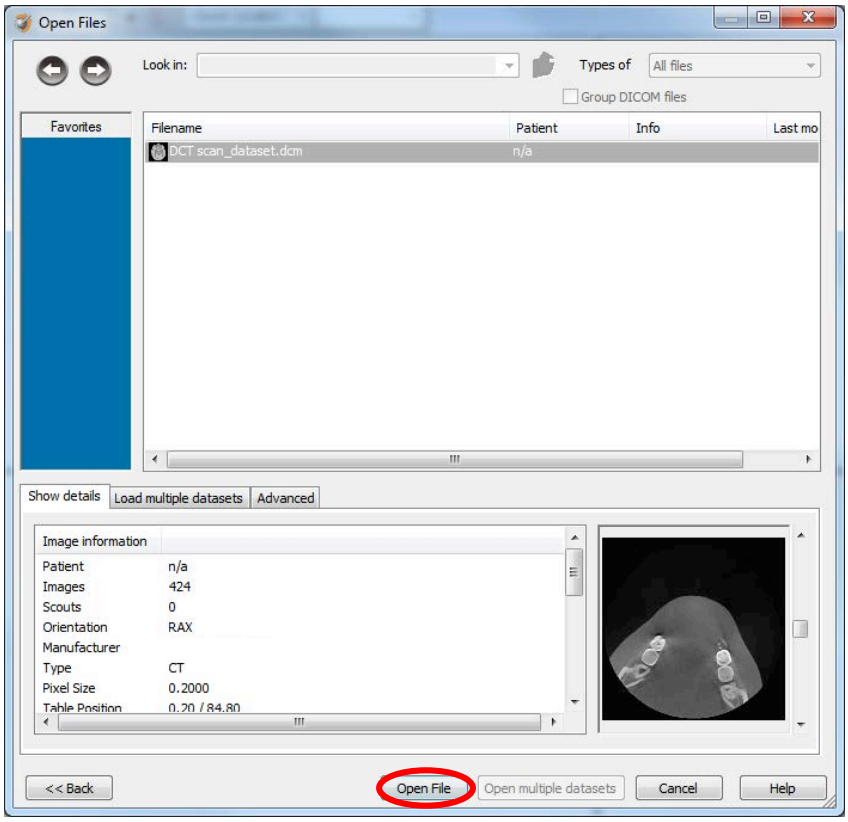
1. Open Simplant Pro and click ‘Open Files’ in the Task Panel.



2. In the ‘Open Files’ dialog box browse to the folder where you saved the dicom images and click ‘Next’.

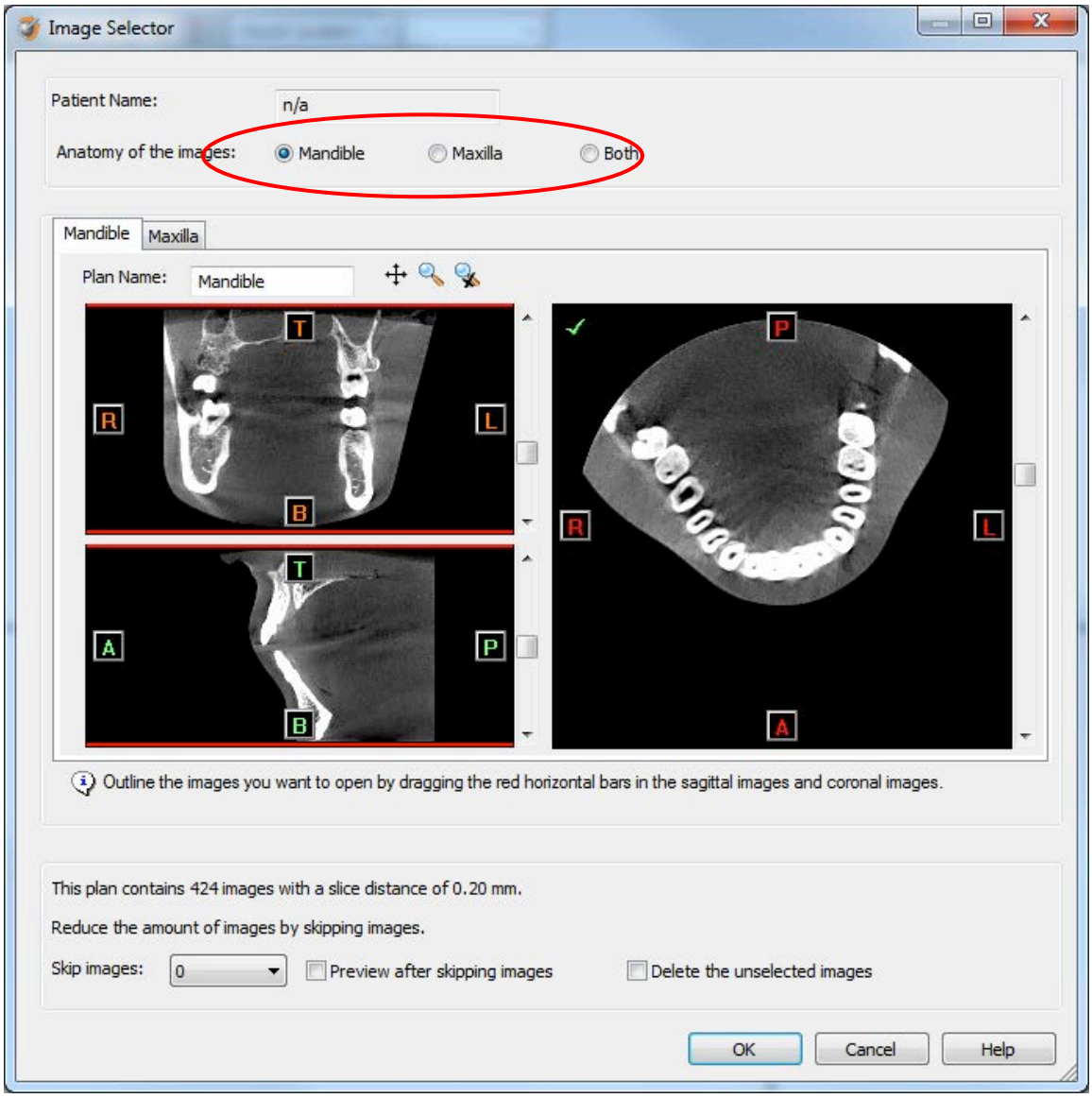


3. By clicking ‘next’, the data set becomes grouped. The image information and preview of the axial images can already be checked. Select the data set and click ‘Open File’.

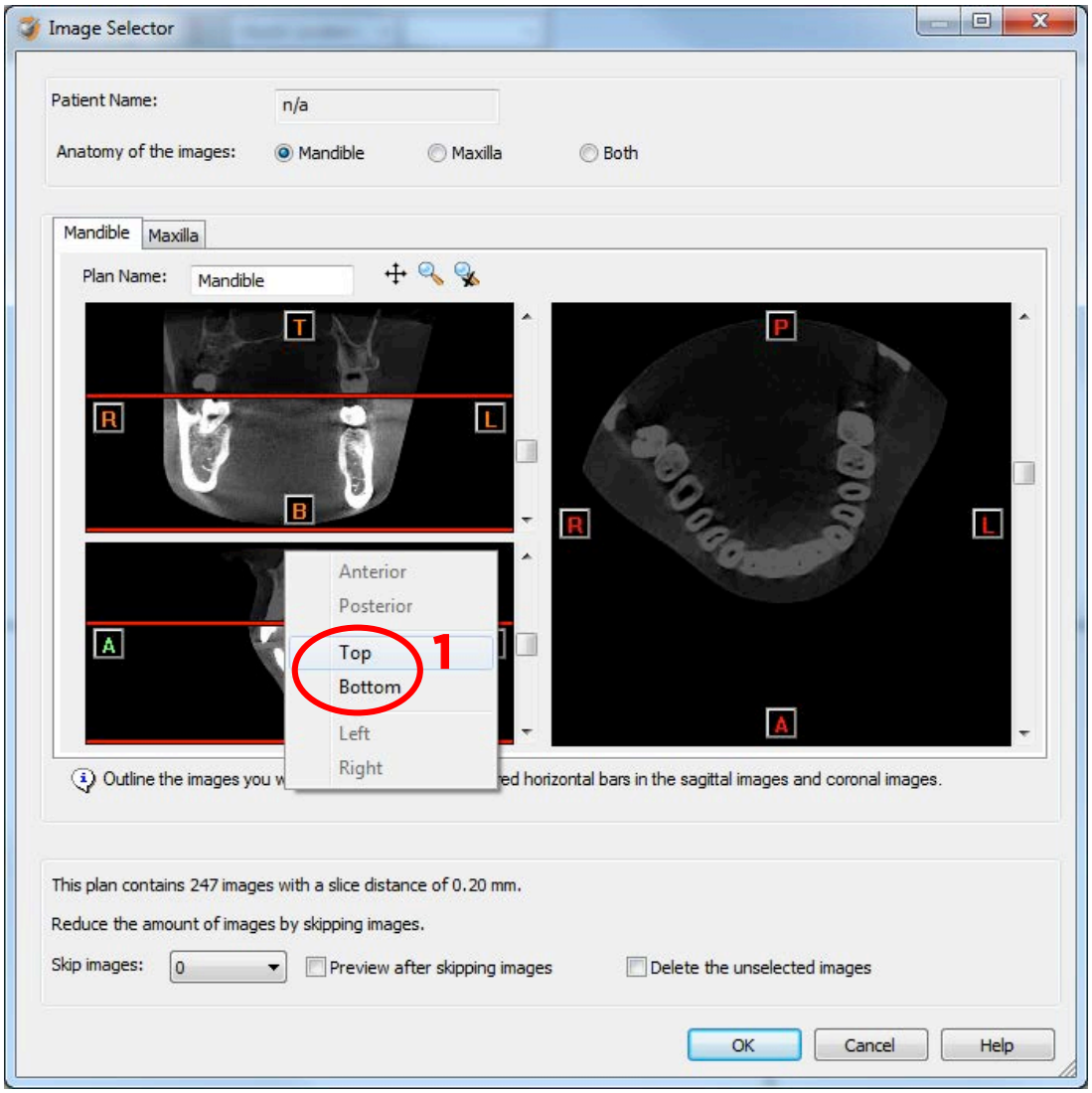


REMARK: Activating the checkbox ‘Group dicom files’ in the previous step (step 10) will in the future automatically group your dicom files and show you the preview.

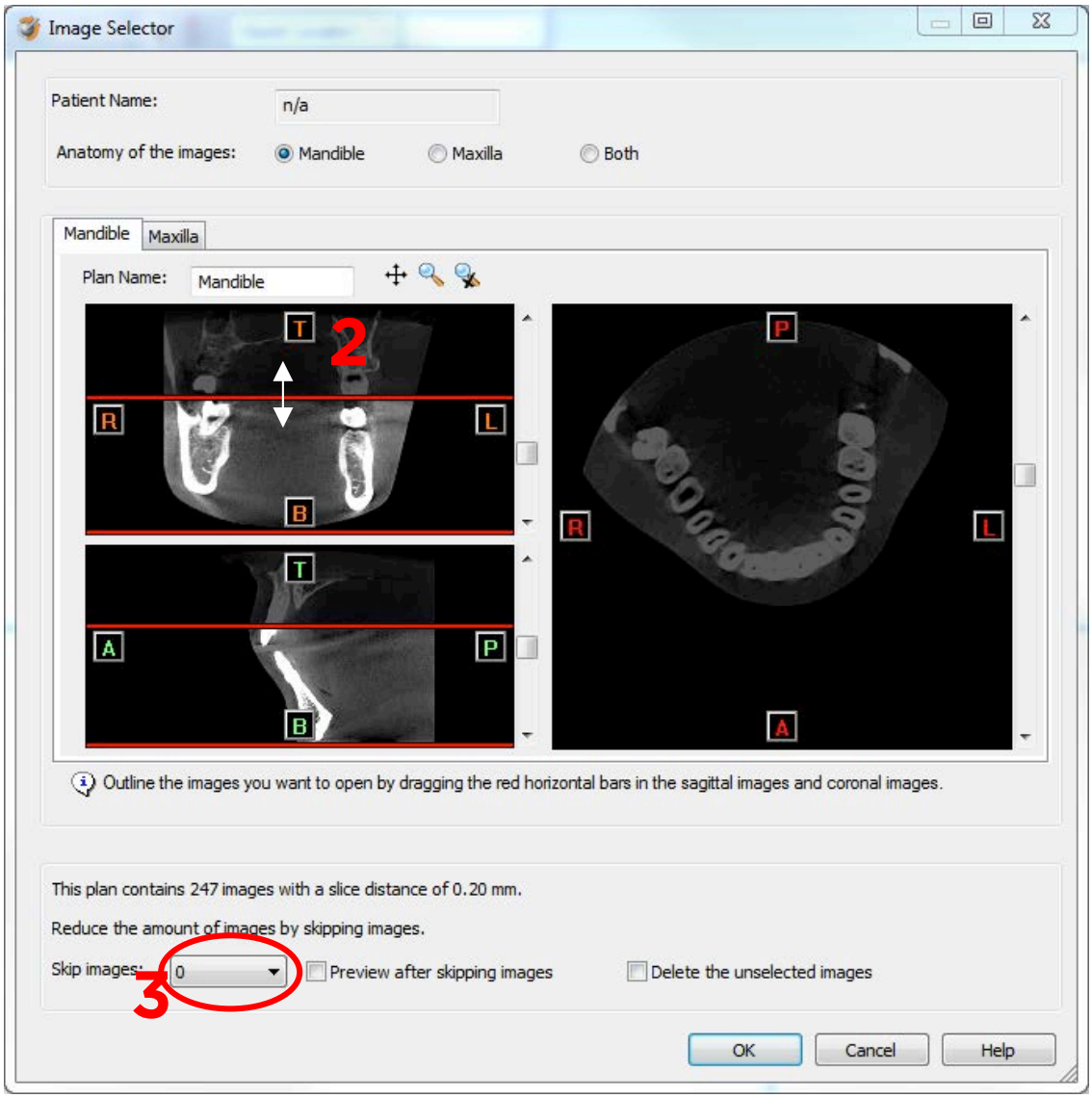
4. The Image Selector dialog is prompted to the user. In this dialog, the user selects the corresponding anatomy of the images, and selects the required images for importing.



If one or more orientation parameters were not exported, review if the orientation that was set is correct. The orientation can be adjusted by selecting the correct orientation parameter in the dropdown (1).



In order to reduce software load, you can REMOVE UNNECESSARY IMAGES from the start or the end of the frame set by dragging the red lines in the coronal and sagittal view.(2)



In order to further reduce software load, you can remove axial images by selecting the skipped image count different from 0 (for example: skip images = 1 selects every second image, skip images= 2 selects every 3rd image) (3).
We recommend not using the skip image functionality unless the dataset is really huge and slows down the Simplant application on your computer.
When ready, press OK and the software imports the selected frame set to Simplant.

5. You are now ready to start your planning.

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