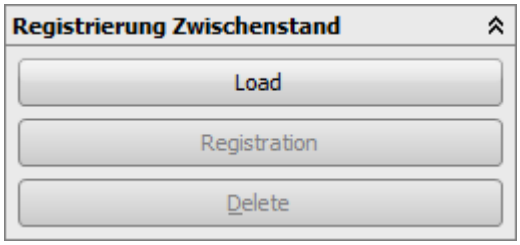
Panel Scan-Refinement

The functionality in panel [Scan-Refinement] can be used to adjust a calculated aligner step by the actual treatment situation using an intermediate scan to refine the current step and therefore, the subsequent planning.

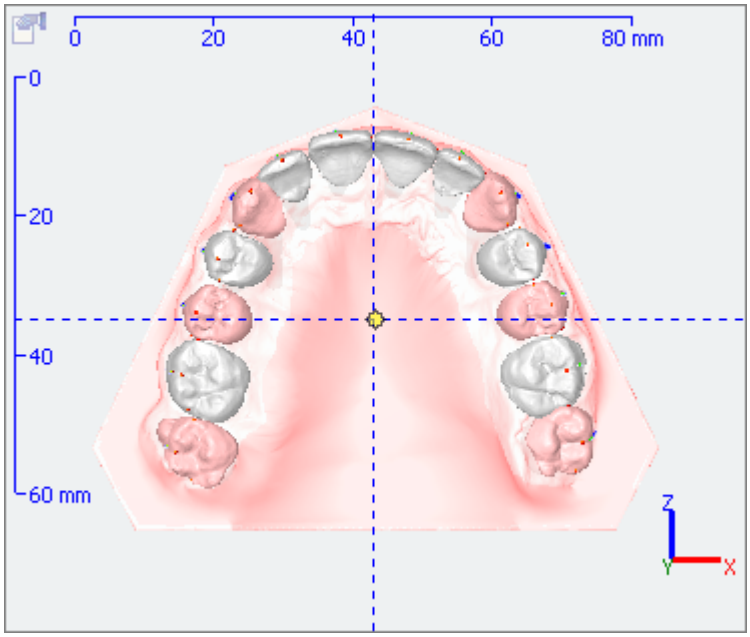


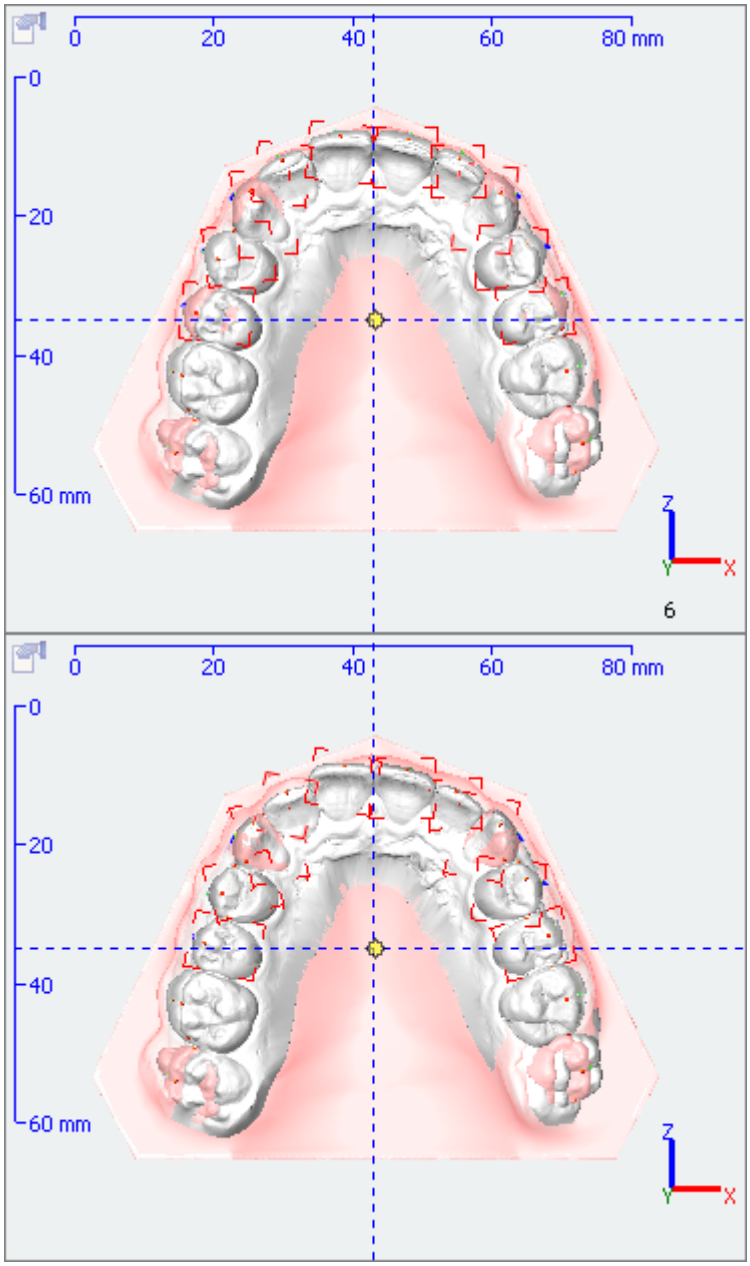
The intermediate scan has to be imported as a model finding as usual. It should be aligned as identical as possible like the malocclusion scan which originally was used for the alinger planning project.

By button [Load] the intermediate scan is imported to the Aligner_3D module, overlayed and aligned by common surface features which have not been influenced by the treatment so far.

By button [Registration] all single teeth of the planning finding selected in the module object list will be aligned by the corresponding tooth surfaces in the intermediate scan.

By button [Delete] after the refinement is completed the refinement scan can be removed again from the planning project. Starting from such corrected situation, now the subsequent aligner steps can be calculated more precisely than w/o such refinement.





The advantage of such method compared to other ones (if any) is that the intermediate scans used for step refinement can be used as bulk model without segmentation or other pre-proceesing. Thus, the only additional effort of the method is to perform one additional scan per refinement what might be justified by the improvement of the treatment results, especially if i/o scanners are used.

Note
It is important for the functionality of the procedure that both, the malocclusion scan that was used for the initial aligner planning project but also the intermediate refinement scans cover sufficiant skelettal surface features (gingiva, palatal) which are not influenced by the previous treatment.