IOS Scan Protocol

This document outlines the recommendations for obtaining an intraoral scan (IOS) that will be appropriate for planning and ordering an All at Once® Implant Bridge and guides (using a TRIOS).

Pre-treatment considerations:

- Consider the need to trim (e.g. supra-erupted teeth) or add to teeth (e.g. infra-erupted teeth) to improve incisal/occlusal plane and level.

IOS scan requirements:

- STL or PLY format
- No holes in the scan
- All teeth and 6mm soft tissue captured
- All hard palate captured (maxilla)
- Digital file of physical impression is preferred for mandibular edentulous spaces greater than 2 teeth
- Identify landmarks that can be used as references when designing the final teeth

Protocol for patients without RPD:

- 3 scans:
    - Treatment Arch
    - Opposing Arch
    - Bite (at the restorative vertical dimension)
- Set up order as Scan only
- Make adjustments to occlusion as necessary to eliminate CO-MI slide (See * Notes below)
- Scan lower and upper jaws, using manufacturer's scan pathway
- Make sure patient is at the correct OVD and correct Jaw position and scan occlusal registration (both sides)
- Align occlusal registration and verify that the occlusion is correct

Protocol for patients with RPD:

- 4 scans:
    - Treatment Arch with RPD
    - Treatment Arch without RPD
    - Opposing Arch
    - Bite (at the restorative vertical dimension)
- Set up order as crown and bridge order
- Mark all teeth in the arch being treated. Material and colour selection does not matter
- Select pre-prep scan
- Make adjustments to occlusion as necessary to eliminate CO-MI slide (See * Notes below)
- Scan the treated arch with the RPD in, using manufacturer's scan pathway, in the pre-prep scan module
- Remove the RPD and proceed to the prep scan module.
- In the prep scan module, delete the segments of the partial denture but keep the patient's existing teeth and soft tissue
- Scan the patient starting in an area of existing teeth and "fill in" the edentulous spaces.
- Verify that the pre-prep scan areas mesh well with the prep scan areas.
- Scan the opposing arch.
- Make sure patient is at the correct OVD and correct Jaw position and scan occlusal registration (both sides)
- Align occlusal registration and check that the occlusion is correct

Protocol for patients with existing dental implants:

- 5 scans:
    - Treatment Arch with implant crown
    - Treatment Arch with emergence profile
    - Treatment Arch with scan body
    - Opposing Arch
    - Bite (at the planned vertical dimension)
- Set up order as crown and bridge
- Mark all teeth in the arch being treated as crowns. Material and colour selection does not matter

- Mark all implants in the arch being treated as abutments. Choose the correct implant brand and model.
- Select pre-prep scan. Emergence profile scan should already be selected
- Make adjustments to occlusion as necessary to eliminate CO-MI slide (See * Notes below)
- Scan the treated arch with the implant crowns in, using manufacturer's scan pathway, in the pre-prep scan module
- Remove the implant crown and proceed to the emergence profile scan module.
- In the emergence profile scan module, delete the segments of the implant crown but keep the patient's existing teeth and soft tissue
- Scan the patient starting in an area of existing teeth and "fill in" the edentulous spaces.
- Verify that the pre-prep scan areas mesh well with the emergence profile scan areas.
- Place the appropriate scan body and select the scan body scan module
- In the scan body scan module, delete the segments of the edentulous area but keep the patient's existing teeth and soft tissue
- Scan the patient starting in an area of existing teeth and "fill in" the edentulous spaces with the scan body
- Remove scan body.
- Scan the opposing arch.
- Make sure patient is at the correct OVD and correct Jaw position and scan occlusal registration (both sides)
- Align occlusal registration and check that the occlusion is correct
- Take a physical impression if there is more than 1 existing implant

Notes:

* The OVD used for recording is the OVD of the final restoration. This may be the same as the patient's existing OVD.

** If the patient's existing OVD is correct, make sure that Centric Occlusion is the same as maximum intercuspation. This will ensure optimal occlusal accuracy and minimal adjustments to the final prosthesis.

*** If the patient's existing OVD is too closed, use a device (e.g. Lucia Jig or anterior deprogrammer) to establish the correct OVD. Place the patient in to Centric Relation Position and record the Occlusal registration