English

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exocad

Specification

.dentalProject: Project File Format for 3rd Party Software Writing Project Files for exocad

Specification by exocad GmbH

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1 Introduction

This specification targets our partners who wish to write `.dentalProject` files, such as intraoral scanner manufacturers.

This document covers the structure of the `.dentalProject` file to be created by 3rd party software, e.g. intraoral scanner software. `.dentalProject` is a format for exchange of patient and treatment related data in digital dentistry. It is designed as an exchange format to transfer data from third-party software to the exocad DentalCAD platform. This specification describes a "minimal" version of the `.dentalProject` file format, useful for transferring basic patient information and definition of indications, and complementing the scan data.

We presuppose that readers of this document understand the basic structure of the XML format.

CAUTION

The given examples of XML files in this document are **not** intended to be copied into your project files verbatim.

For creating your XML files, please use all information given in this document and regard the given segments as examples.

2 The .dentalProject File

The `.dentalProject` file to be created by the 3rd party software contains a minimal set on data relevant to the treatment. These data will be handled as a *project* in the exocad DentalDB software.

DEFINITION of reconstruction types is required FOR ALL TEETH

The exocad DentalCAD software requires the definition of reconstruction types for all teeth. It will not automatically supplement the definition for those teeth you have omitted in the `.dentalProject` file.

Especially, if you provide an antagonist scan, define all its teeth as `HealthyTooth`.

The `.dentalProject` file has the following structure:

```
<Treatment UseRecipientMaterialConfiguration="True">

   <ProjectGUID>12345678-90ab-cdef-1234-567890abcdef</ProjectGUID>
   <Notes>Note</Notes>

   <Patient>
      <PatientName>Doe</PatientName>
      <PatientFirstName>John</PatientFirstName>
      <PatientDateOfBirth>2000-12-25</PatientDateOfBirth>
   </Patient>

   <Teeth>
      <Tooth>
         <Number>16</Number>
         <ReconstructionType>AnatomicCrown</ReconstructionType>
         <SituScan>true</SituScan>
         <MesialConnector>true</MesialConnector>
         <Material>NP</Material>
         <ToothShade>VCL:A1;V3DM:2R2.5</ToothShade>
         <ImplantType>None</ImplantType>
      </Tooth>
```

```
      <Tooth>
        <Number>15</Number>
        <ReconstructionType>Coping</ReconstructionType>
        <SituScan>true</SituScan>
        <MesialConnector>false</MesialConnector>
        <Material>NP</Material>
        <ImplantType>CustomAbutment</ImplantType>
        <MaterialAbutment>PMMA</MaterialAbutment>
        <ToothShade>VCL:A2</ToothShade>
        <ToothShadeIncisal>VCL:A1</ToothShadeIncisal>
        <ToothShadeGingival>VCL:A3</ToothShadeGingival>
      </Tooth>
      <Tooth>
        <Number>35</Number>
        <ReconstructionType>Antagonist</ReconstructionType>
      </Tooth>
    </Teeth>

</Treatment>
```

The meanings of the individual tags are explained in Table 1.

Tag	Meaning	Mandatory
`Treatment`	Root element. Note that the attribute and its value are mandatory: `UseRecipientMaterialConfiguration="True"`. It determines that the recipient chooses the appropriate design parameters for the selected materials. It should always be set by the 3rd party software when writing `.dentalProject` files	yes
`ProjectGUID`	Globally unique identifier. Needs to be set by the 3rd party software, following the universally unique identifier standard (see en.wikipedia.org/wiki/Universally_unique_identifier), using the canonical format with hexadecimal characters	yes
`Notes`	Additional notes that relate to the specifics of the project, e.g. the type of implant, the tooth library anatomy or other details. This information is optional, i.e. the tag may be omitted in the xml file	no
`Patient`	Contains the patient's data	yes
`PatientName`	The patient's last name	yes
`PatientFirstName`	The patient's first name	yes
`PatientDateOfBirth`	The patient's date of birth in the format `YYYY-MM-DD`	no
`Teeth`	Container for all `tooth` elements	yes
`Tooth`	Contains the information concerning one tooth	yes
`Number`	Two-digit tooth number, following the FDI World Dental Federation notation[1] for permanent teeth (values for deciduous teeth are not supported)	yes

Table 1: Explanation of the `.dentalProject` file tags *(continued on next page)*

[1] see en.wikipedia.org/wiki/FDI_World_Dental_Federation_notation

Tag	Meaning	Mandatory
`ReconstructionType`	Defines the role of the tooth during the project. For possible values, see Table 2	yes
`SituScan`	Set to `true` to signal the DentalCAD platform that a pre-operative scan of that tooth exists (see section 3 for naming conventions of the file containing the pre-operative scan data). Default is `false`	no
`MesialConnector`	Set to `true`, if the tooth shall be connected to its mesial neighbour. Note that the mesial connector of tooth 11 is identical with that of tooth 21. The same applies to teeth 31 and 41, respectively	no
`Material`	The material class. This is not the specific material to be used for the reconstruction of the tooth, which will be selected in the DentalDB. In case of veneered restorations, `Material` specifies the framework material. For possible values, see Table 3	yes
`ToothShade`	The final color of the reconstruction: the color for the overall tooth if `ToothShadeIncisal` and `ToothShadeGingival` are not set; the color for the middle of the tooth if both `ToothShadeIncisal` and `ToothShadeGingival` are set. You can define 1 to n colors, separated by semicolon and following the scheme [shade guide]:[value]. Currently, we support: • `V3DM` (Vita 3D Master) • `VCL` (Vita Classical) Example: `VCL:A1;V3DM:2R2.5`	no
`ToothShadeIncisal` `ToothShadeGingival`	The color for the incisal or gingival region. These tags are optional - define either both (only in combination with `ToothShade`) or none	no
`ImplantType`	The implant type to be used. For possible values, see Table 4	no
`MaterialAbutment`	The material of the abutment, in case of a custom abutment. For possible values, see Table 3	no

Table 1: Explanation of the `.dentalProject` file tags

Tag	Meaning	Possible to set implant type:
`AnatomicCrown`	A full contour crown	yes
`AnatomicPontic`	A full contour pontic	no
`AnatomicInlay`	An inlay or onlay with full anatomy	no
`Veneer`	A veneer restoration over a prepped tooth (full anatomic)	no
`MissingTooth`	A tooth that is missing and is not to be restored. Needs to be defined in order to be able to place connectors between teeth that are "normally" not next to each other. E.g. to create a bridge with teeth 14-16-17, tooth 15 should be defined as "Missing tooth"	no

Table 2: Values of `ReconstructionType` *(continued on next page)*

Tag	Meaning	Possible to set implant type:
`HealthyTooth`	A healthy tooth that is contained in the scan, but is not to be restored in any way	no
`Antagonist`	Teeth in the opposing jaw of the restorations to use an antagonist scan	no
`AnatomicWaxup`	A full contour crown created from a full anatomic wax model over a prep (digital copy milling)	yes
`Attachment`	An extra-coronal attachment	no
`BarPillar`	The portion of a bar that connects to the implant	yes
`BarSegment`	The portion of a bar that provides connection between the pillars	no
`BiteSplint`	A device to expand or correct bites, can be used for custom night-guards and sports-guards	no
`BiteSplintGap`	To be used with bite splints, denotes a gap that should be covered with bite splint material	no
`Coping`	A coping derived from the full anatomic shape (using cutback to create space for ceramic). First, the anatomic shape is designed; then it is shrunk to create the coping	yes
`OffsetInlay`	A framework for an inlay with a fixed thickness	no
`OverpressCrown`	Pressed crown - A two-part restoration, where the framework will be designed as an anatomic coping; additionally, a second part is created, which contains the chewing surface of the restoration – to be milled in wax/PMMA, later to be burned out ("overpress")	yes
`OverpressPontic`	Pressed pontic - A two-piece pontic consisting of a framework and full contour over-press part	no
`PrimaryTelescope`	Primary part for a removable structure (telescopic crown)	yes
`ProstheticTooth`	A full denture, for full edentulous cases using standard tooth libraries	no
`ProvisionalCrown`	A hollow-shell crown with external surface corresponding to the full anatomy design	no
`ProvisionalPontic`	A hollow-shell pontic with external surface corresponding to the full anatomy design	no
`ReducedPontic`	A pontic derived from the full anatomic shape, using cutback to create space for ceramic	no
`ReducedWaxup`	A framework fully derived from an anatomic wax model a with cutback for porcelain	yes
`WaxupPontic`	A full contour from anatomic waxup over a missing or extracted tooth	no

Table 2: Values of `ReconstructionType`

Most commonly used values are printed in **`bold type`**.

Tag	Meaning
AU	Gold
FS	Feldspar
GCER	Glas ceramic, which are neither LS1, LS2, nor FS
LS1	Lithium Silicate Glass Ceramic, e.g. Vita Suprinity, Dentsply Celtra
LS2	Lithium Disilicate Glass Ceramic, e.g. Ivoclar e.max, HASS Amber
MLZI	Multilayer zirconium dioxide
NP	Non Precious: CrCo - *not* Titanium
PEEK	Peek
PMMA	Poly(methyl methacrylate)
RC	Resin Ceramic: Ultimate / enamic / cerasmart
TEMP	Temporary restoration, e.g. Vita CADTemp / lab choice of material
TI	Titanium
TRYIN	Try-in material / lab choice - e.g. wax or PMMA
WAX	Wax
ZI	Zirconium dioxide
ZIHT	Zirconium dioxide High Translucency
Healthy	The healthy tooth
None	No material to be used (in case of `MissingTooth`)

Table 3: Values of `Material` and `MaterialAbutment`

Please contact us for explicit specification of vendor-specific materials (e.g. LZ for Lava Zirconia). All trademarks mentioned in this document are the property of the respective holder.

Tag	Meaning
None	No implant
CustomAbutment	Implant with custom abutment
WithoutAbutment	Screw retained restoration

Table 4: Values of `ImplantType`

3 Data Storage

All data should be saved in the same directory as the `.dentalProject` file.

3.1 Scan Data

- main scan:
  The main scan should use the same filename as the project file, i.e. `<projectname>.stl` if the project file is `<projectname>.dentalProject`.

Additional scan filenames are derived from that filename, following the scheme `<projectname>-<tag>.stl`:

- upper and lower jaw scans:
  `<projectname>-<jaw>.stl`, where `<projectname>` needs to be the filename of the `.dentalProject` file (without extension), and `<jaw>` specified as either `upperjaw` or `lowerjaw`, depending on the scan

  Example: If your project file is `2019-10-19-00001-002.dentalProject`, the upper jaw scan file would be `2019-10-19-00001-002-upperjaw.stl`
- additional jaw scans:
  `<projectname>-<jaw>-<tag>.stl`, where `tag` can be
  - `situ` for a pre-operative scan
  - `marker` for a scan that contains the scan abutment
- jaw registration scans:
  The exocad DentalCAD software requires registered jaw scans. If your software does not offer jaw registration, (i.e. the upper and lower jaw scans are not positioned relative to each other), the exocad DentalCAD software provides a registration step. In order to activate this step, you will have to:
  - provide a bite scan (i.e. upper and lower jaw are scanned in occlusion) with the filename:
    `<projectname>-biteregister-unregistered.stl`
  - mark all scans of the project as unregistered by extending their file name to:
    `<projectname>-<jaw>-<tag>-unregistered.stl`
- movement marker scan:
  `<projectname>-movementmarker.stl`
- bite rim scan:
  `<projectname>-aestheticplate.stl`; will be only loaded in the Full Denture module for scans of bite rims that will help to define e.g. the occlusal plane for cases of edentulous patients

SCANS FOR IMPLANT BASED RECONSTRUCTIONS

If your project contains implant based reconstructions, note the following:

- The upper and lower jaw scans (`<projectname>-<jaw>.stl`) must not contain any scan abutments.
- An additional scan abutment scan needs to be provided (`<projectname>-<jaw>-marker.stl`)

RECOMMENDED DATA FORMAT FOR SCANS

For better performance, we recommend to use the *Object File Format* (`.off`) instead of STL.

Scan Data Orientation

The exocad DentalCAD software offers a step for defining the scan data orientation. Depending on whether the scanning software communicates the axis orientation of the scans, you may provide this info in order to make the software skip this step.

exocad requires the following orientation:

- The *upper* jaw scan data needs to be oriented such that the occlusal axis points in the *negative* direction of the z axis.
- The *lower* jaw scan data needs to be oriented such that the occlusal axis points in the *positive* direction of the z axis.

If the coordinate system of your scanner is fix, create a `.matrix4` file for the project: It describes the transformation from the scanner coordinate system to the orientation required by exocad.

Example for an `.matrix4` file:

```
<Matrix4>
   <_00>-0.9976469614658624</_00>
   <_01>-0.061359912508557317</_01>
   <_02>0.030582599207894218</_02>
   <_03>0</_03>
   <_10>0.060926781400852545</_10>
   <_11>-0.998031720317761</_11>
   <_12>-0.014902919356151628</_12>
   <_13>0</_13>
   <_20>0.0314368638729146</_20>
   <_21>-0.013004535774813269</_21>
   <_22>0.99942195469816308</_22>
   <_23>0</_23>
   <_30>35.85229923003368</_30>
   <_31>-15.981748365320689</_31>
   <_32>-24.031773039784127</_32>
   <_33>1</_33>
</Matrix4>
```

If the original scan data already meets the exocad default orientation (see above), the .matrix4 file shall simply contain the 4x4 identity matrix.

If the axis orientation is unknown (i.e. if no `.matrix4` file exists), the CAD software will prompt the user to manually define it.

3.2 Preparation Margin

The margin line can be stored in an `xyz` file.

- preparation margin:
  `<projectname>-<toothnumber>-margin.xyz`, where `<toothnumber>` is the number of the tooth following the FDI World Dental Federation notation[2] for permanent teeth (values for deciduous teeth are not supported)

The preparation margin file contains the points of the margin line for a tooth, one per line with space as separator:

[2] see en.wikipedia.org/wiki/FDI_World_Dental_Federation_notation

```
<!-- The following line is optional and may be omitted -->
15
8.4713 27.1377 6.93975
6.69834 27.1127 6.18535
4.6809 27.3268 5.93878
3.04613 26.7634 6.11831
2.26385 25.3263 6.83198
2.35324 22.7815 6.93495
2.48068 20.4974 6.95998
3.40017 19.0047 6.5454
5.6219 18.6418 6.55403
7.52036 18.8397 6.7361
9.52049 19.2967 6.7034
10.8801 19.8955 7.29746
11.5268 21.6262 7.94961
11.1774 23.8579 7.81214
10.5079 25.6428 7.63711
9.34022 26.821 7.22194
```

The first line is optional. You can state the total number of points here, if available.

3.3 Insertion Direction

The insertion direction can be stored in an `xyz` file.

- insertion direction:
  `<projectname>-<toothnumber>-insertiondirection.xyz`, where `<toothnumber>` is the number of the tooth following the FDI World Dental Federation notation[3] for permanent teeth (values for deciduous teeth are not supported)

Store the insertion direction as either two points (lower center and upper center) or one vector:

```
11.5246 8.46849 3.60039
11.5398 8.56332 4.60744
```

or

```
0 0 1
```

4 Sample Files

Example I

This illustrates a very simple project file.

```
<Treatment UseRecipientMaterialConfiguration="True">

   <ProjectGUID>12345678-90ab-cdef-1234-567890abcdef</ProjectGUID>

   <Teeth>
      <Tooth>
         <Number>14</Number>
         <ReconstructionType>AnatomicCrown</ReconstructionType>
         <Material>NP</Material>
      </Tooth>
      <Tooth>
         <Number>44</Number>
         <ReconstructionType>Antagonist</ReconstructionType>
      </Tooth>
   </Teeth>
```

[3] see en.wikipedia.org/wiki/FDI_World_Dental_Federation_notation

```
  <Patient>
    <PatientName>Doe</PatientName>
    <PatientFirstName>John</PatientFirstName>
  </Patient>

</Treatment>
```

The meanings of the individual tags are explained in Table 1.

Example II

This shows a more complex case definition, with multiple restorations, including one that is implant based.

This example is a good test case to check whether your software for defining indications can correctly handle atypical, but still common cases, including bridges with one 'skipped' tooth (34-36-37), cantilever bridges (37 is cantilever pontic), combined inlay/crown bridges (44 is inlay, 46 is crown), and restorations on custom abutments.

```
<Treatment UseRecipientMaterialConfiguration="True">

  <ProjectGUID>12345678-90ab-cdef-1234-567890abcdef</ProjectGUID>

  <Teeth>
    <Tooth>
      <Number>17</Number>
      <ReconstructionType>Antagonist</ReconstructionType>
      <MesialConnector>false</MesialConnector>
      <Material>Healthy</Material>
    </Tooth>
    <Tooth>
      <Number>16</Number>
      <ReconstructionType>Antagonist</ReconstructionType>
      <MesialConnector>false</MesialConnector>
      <Material>Healthy</Material>
    </Tooth>
    <Tooth>
      <Number>15</Number>
      <ReconstructionType>Antagonist</ReconstructionType>
      <MesialConnector>false</MesialConnector>
      <Material>Healthy</Material>
    </Tooth>
    <Tooth>
      <Number>14</Number>
      <ReconstructionType>Antagonist</ReconstructionType>
      <MesialConnector>false</MesialConnector>
      <Material>Healthy</Material>
    </Tooth>
    <Tooth>
      <Number>13</Number>
      <ReconstructionType>Antagonist</ReconstructionType>
      <MesialConnector>false</MesialConnector>
      <Material>Healthy</Material>
    </Tooth>
    <Tooth>
      <Number>12</Number>
      <ReconstructionType>Antagonist</ReconstructionType>
      <MesialConnector>false</MesialConnector>
      <Material>Healthy</Material>
    </Tooth>
    <Tooth>
```

```
      <Number>11</Number>
      <ReconstructionType>Antagonist</ReconstructionType>
      <MesialConnector>false</MesialConnector>
      <Material>Healthy</Material>
    </Tooth>
    <Tooth>
      <Number>21</Number>
      <ReconstructionType>Antagonist</ReconstructionType>
      <MesialConnector>false</MesialConnector>
      <Material>Healthy</Material>
    </Tooth>
    <Tooth>
      <Number>22</Number>
      <ReconstructionType>Antagonist</ReconstructionType>
      <MesialConnector>false</MesialConnector>
      <Material>Healthy</Material>
    </Tooth>
    <Tooth>
      <Number>23</Number>
      <ReconstructionType>Antagonist</ReconstructionType>
      <MesialConnector>false</MesialConnector>
      <Material>Healthy</Material>
    </Tooth>
    <Tooth>
      <Number>24</Number>
      <ReconstructionType>Antagonist</ReconstructionType>
      <MesialConnector>false</MesialConnector>
      <Material>Healthy</Material>
    </Tooth>
    <Tooth>
      <Number>25</Number>
      <ReconstructionType>Antagonist</ReconstructionType>
      <MesialConnector>false</MesialConnector>
      <Material>Healthy</Material>
    </Tooth>
    <Tooth>
      <Number>26</Number>
      <ReconstructionType>Antagonist</ReconstructionType>
      <MesialConnector>false</MesialConnector>
      <Material>Healthy</Material>
    </Tooth>
    <Tooth>
      <Number>27</Number>
      <ReconstructionType>Antagonist</ReconstructionType>
      <MesialConnector>false</MesialConnector>
      <Material>Healthy</Material>
    </Tooth>
    <Tooth>
      <Number>37</Number>
      <ReconstructionType>AnatomicPontic</ReconstructionType>
      <MesialConnector>true</MesialConnector>
      <Material>ZI</Material>
      <SituScan>true</SituScan>
    </Tooth>
    <Tooth>
      <Number>36</Number>
      <ReconstructionType>AnatomicCrown</ReconstructionType>
      <MesialConnector>true</MesialConnector>
      <Material>ZI</Material>
      <ImplantType>None</ImplantType>
      <SituScan>true</SituScan>
```

```
    </Tooth>
    <Tooth>
      <Number>35</Number>
      <ReconstructionType>MissingTooth</ReconstructionType>
      <MesialConnector>true</MesialConnector>
      <Material>None</Material>
    </Tooth>
    <Tooth>
      <Number>34</Number>
      <ReconstructionType>Coping</ReconstructionType>
      <MesialConnector>false</MesialConnector>
      <Material>ZI</Material>
      <ImplantType>None</ImplantType>
      <SituScan>true</SituScan>
      <ToothShade>VCL:A2</ToothShade>
      <ToothShadeIncisal>VCL:A1</ToothShadeIncisal>
      <ToothShadeGingival>VCL:A3</ToothShadeGingival>
    </Tooth>
    <Tooth>
      <Number>33</Number>
      <ReconstructionType>Coping</ReconstructionType>
      <MesialConnector>false</MesialConnector>
      <Material>ZI</Material>
      <ImplantType>CustomAbutment</ImplantType>
      <MaterialAbutment>TI</MaterialAbutment>
      <SituScan>false</SituScan>
    </Tooth>
    <Tooth>
      <Number>32</Number>
      <ReconstructionType>HealthyTooth</ReconstructionType>
      <MesialConnector>false</MesialConnector>
      <Material>Healthy</Material>
    </Tooth>
    <Tooth>
      <Number>31</Number>
      <ReconstructionType>HealthyTooth</ReconstructionType>
      <MesialConnector>false</MesialConnector>
      <Material>Healthy</Material>
    </Tooth>
    <Tooth>
      <Number>41</Number>
      <ReconstructionType>HealthyTooth</ReconstructionType>
      <MesialConnector>false</MesialConnector>
      <Material>Healthy</Material>
    </Tooth>
    <Tooth>
      <Number>42</Number>
      <ReconstructionType>HealthyTooth</ReconstructionType>
      <MesialConnector>false</MesialConnector>
      <Material>Healthy</Material>
    </Tooth>
    <Tooth>
      <Number>43</Number>
      <ReconstructionType>HealthyTooth</ReconstructionType>
      <MesialConnector>false</MesialConnector>
      <Material>Healthy</Material>
    </Tooth>
    <Tooth>
      <Number>44</Number>
      <ReconstructionType>AnatomicInlay</ReconstructionType>
      <MesialConnector>false</MesialConnector>
```

```
        <Material>NP</Material>
        <SituScan>false</SituScan>
      </Tooth>
      <Tooth>
        <Number>45</Number>
        <ReconstructionType>AnatomicPontic</ReconstructionType>
        <MesialConnector>true</MesialConnector>
        <Material>NP</Material>
        <SituScan>false</SituScan>
      </Tooth>
      <Tooth>
        <Number>46</Number>
        <ReconstructionType>AnatomicCrown</ReconstructionType>
        <MesialConnector>true</MesialConnector>
        <Material>NP</Material>
        <ImplantType>None</ImplantType>
        <SituScan>false</SituScan>
      </Tooth>
      <Tooth>
        <Number>47</Number>
        <ReconstructionType>HealthyTooth</ReconstructionType>
        <MesialConnector>false</MesialConnector>
        <Material>Healthy</Material>
      </Tooth>
    </Teeth>

    <Patient>
      <PatientName>Doe</PatientName>
      <PatientFirstName>John</PatientFirstName>
    </Patient>

</Treatment>
```

The meanings of the individual tags are explained in Table 1.

The example includes a three-unit-bridge 34-36-37 (Cantilever bridge), where 34 is a coping and the rest is full anatomic. A special case is that the patient has only one premolar at this side. Further, it includes a custom abutment for 33 (the abutment material is also specified) with a coping, and an inlay bridge 46-45-44 that comes with a pre-operative scan.

Assuming that this project file is named `2015-06-14-00001-002.dentalProject`, the following files should be saved along with it:

- `2015-06-14-00001-002-upperjaw.stl` - upper jaw scan
- `2015-06-14-00001-002-lowerjaw.stl` - lower jaw scan
- `2015-06-14-00001-002-lowerjaw-marker.stl` - lower jaw scan abutment scan (because tooth 33 has `ImplantType` set to `CustomAbutment`, a marker scan is required)
- `2015-06-14-00001-002-lowerjaw-situ.stl` - lower jaw pre-op scan (because teeth 35/36/37 have `SituScan` to `true`)

Please contact us for other file naming options (e.g. to provide multiple pre-op scans that cover different parts of the same jaw).

5 Support

We provide third-level support to our partners in case of technical questions/issues related to our products, usage of the software, exoportal, etc. You can contact our support team to request quick online demonstrations of new features demonstrated by application specialists.

As a certified company (ISO 13485), we document support issues and the given solutions or results. To contact our support team, please send a request to your region's respective email address. Your email will automatically create a ticket in our support system. You will receive a ticket number along with the automatic response email. Our support team will contact you by email or by phone.

To follow up, please keep your ticket number ready. A convenient way to follow up is to reply to our ticket response email. Without a ticket number, we cannot handle your request (especially when making contact via Skype). Thank you for your understanding.

IMPORTANT

To resolve your issue quickly and smoothly:

- Send a separate email for each issue. Please do not introduce new topics to an existing email conversation!
- Do not modify the subject line of the support reply email!
- Provide all necessary data (project file, scan data, construction files) and additional information (software build number, OS, etc). Without this data, we cannot reproduce a problem (technical or usage) and therefore, we cannot handle it!

To view the support contact details of your support region, visit
exocad.com/secure-area/technical-and-software-support.