



# Can I reuse existing PLAXIS 3D geometrical objects in a new project?

Using the `__saveobjects` command in PLAXIS 3D 2013 / 3D AE / 3D Classic

Sometimes you want to reuse a part of the geometry of an already existing PLAXIS 3D model in a different model. With PLAXIS 3D it is possible to export geometrical objects from Input using the command `__saveobjects`. The volumes and surfaces from these objects can be easily imported into the newly created PLAXIS 3D project using the  *Import soil...* and  *Import structures...* options in Input.

The available formats of the exported files are the following:

- Plaxis 3D Object files (\*.px3o)
- Stereolithography files (\*.stl)
- Plaxis Mesh files (\*.plxmesh)

The command has the following structure:

```
__saveobjects "px3o" "C:\PLAXIS3D\Objects"
```

Parameters:

<code>__saveobjects</code>	the command, note the double underscore
<code>"px3o"</code>	file extension of the exported files
<code>"C:\PLAXIS3D\Objects"</code>	directory of the saved objects

The files exported in the specified directory include objects present in both Blue and Green coloured tabs in PLAXIS Input program.

## Geometry in blue tabs

The exported files of objects created in *Blue tabs* (Soil / Structures) are:

- Surfaces and Polygons
- Volumes
- Soil volumes from boreholes

### Example

In the case of an object called *Polygon\_1* in Structures mode, it can be exported to a \*.px3o file. This file would be named:

```
StrucSurf-Polygon_1.px3o
```

Note that the first part of the name indicates that this object was created in Structures mode and it is a surface.

## Geometry in green tabs

The exported files of objects present in *Green tabs* (e.g. Staged construction mode), which contain all intersected objects are the following:

- Surfaces and Polygons
- Volumes
- Soil volumes from boreholes
- Points (note: cannot be imported)
- Lines (note: cannot be imported)

### Example PLAXIS 3D AE

In the case of an object called Polygon\_1\_1 in Staged construction mode, it can be exported to a \*.px3o file, and this file would be named:

*Polygon\_1\_1-000.px3o*

Note that relevant files are created for every object after the intersection process that are present in Water levels/Stage construction mode.

### **Example 3D 2013**

In the case of an object called Polygon\_1, in Staged construction mode, it is called e.g. *CS\_Polygon\_1*, it can be exported to a \*.px3o file, and this file would be named:

*CS\_Polygon\_1-000.px3o*

Note that the first part of the name indicates that this object is created after the intersection process, C(ross) S(ection), and it is present in Water levels/Stage construction mode.

Note that when choosing the \*.stl or \*.px3o formats each object is saved in its separate file. However, in the case of the \*.plxmesh format all objects of the geometry are exported in a single file.

For more details on the `__saveobjects`-command or any other command, please refer to the Plaxis 3D Command Reference, available via the Help menu.