

**2023.04.01**

Working to create a urdf (+/- .xacro) file for the OSR.

There's a CAD file of the original NASA/JPL OSR in OnShape as well as the proposed V2 of the OSR:

<https://cad.onshape.com/documents/5c358484057fc4c01d5e5803/w/bdf583acdf29d75695be5fbc/e/e3eb7193ecdec5b0a710978b>

My copy is here:

<https://cad.onshape.com/documents/8f8189d761f726bcf69980f5/w/ec57fc1702d5177d685a86c9/e/ccf42f743a831a145aea7c8a>

The main documentation for "OnShape-to-robot" conversion tool is here:

<https://onshape-to-robot.readthedocs.io/en/latest/>

and the github is here with examples:

<https://github.com/Rhoban/onshape-to-robot>

It appears to require a Linux environment so will use the UbuntuBox. [per one of the tutorials it can also be installed in Windows]

There's

a dull tutorial here:

<https://www.youtube.com/watch?v=0M2b1p6H20o>

a French accent tutorial here:

<https://www.youtube.com/watch?v=C8oK4uUmbRw>

**a completely French tutorial here:**

<https://www.youtube.com/watch?v=GeZZZH02w3Q>

a ROS Discourse here:

<https://discourse.ros.org/t/onshape-to-sdf-urdf-simulation/8547>

a Hackaday tutorial here:

<https://hackaday.com/2021/02/28/onshape-to-robot-models-made-easier/>

a Reddit tutorial here:

[https://www.reddit.com/r/robotics/comments/lrklf4/onshape\\_to\\_robot\\_tutorial\\_export\\_urdf\\_sdf\\_from/](https://www.reddit.com/r/robotics/comments/lrklf4/onshape_to_robot_tutorial_export_urdf_sdf_from/)

**2023.04.02**

Following: <https://www.youtube.com/watch?v=C8oK4uUmbRw>

Get OnShape API keys:

<https://dev-portal.onshape.com/keys/createkey>

[Create new API key]

check all boxes

click: [Create API key]

## API Key Secret

The API key's access key is QJZ2vl6e9hqj2fochaal2AWp and the secret key is kldFkz1sXGFMskEhvGfepKdiMY8rwDbwms6Xgm17lBz5ef0v Please transfer this securely to your application now as you will not be able to display this secret key string again.

Close

access key is QJZ2vl6e9hqj2fochaal2AWp

secret key is kldFkz1sXGFMskEhvGfepKdiMY8rwDbwms6Xgm17lBz5ef0v

Suggests create a 'keys' file with the keys and 'source' it:

```
$ nano OnShape_keys
```

```
export ONSHAPE_API=https://cad.onshape.com
```

```
export ONSHAPE_ACCESS_KEY=QJZ2vl6e9hqj2fochaal2AWp
```

```
export ONSHAPE_SECRET_KEY=<hidden key>
```

OR

can be included in your .bashrc file