# Online or Offline created 'boot application' have different sizes

The size of the boot application is different depending on the creation method whether done 'Online' or 'Offline'. The difference in boot application size results from the following assumptions:

When created offline, a default value for the communication's buffer is applied which may make the boot app larger than one created online.

## Explanation

### Offline generation:

- When a boot application is created offline, a default value for the communication's buffer is applied.
- Since a determination with the PLC does not take place, a size is selected, which permits it in 99,9% of all cases these then with the Downloaden without problems to transfer to be able.
- This takes into account that there are also controllers which are equipped accordingly "small".

#### Online generation:

- Depending on the hardware/PLC is determined/negotiated how large the buffer for downloading is, and the boot project is divided into correspondingly large/fewer parts.
- This also requires less communication's headers and fewer splits in the code.
- · This can be noticeable with significantly less code in the boot application and therefore accordingly be smaller in size.

#### See also....

- Our CODESYS Online Help (OLH)Website
- How to: Creating a Boot Application and Generating Application Code
- Settings for Application 'Properties' 'Boot Application'