Online change

straton user guide – Rev. 6

CP_R31_006_H

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Content

1. Prepare the online change

First step for online change is to prepare the project by changing the settings. Right-click on the project > Settings > Runtime > On Line Change

For each data types, a maximum size of allowed memory need to be declared:

Warning: The application need to be compiled and downloaded to the straton runtime to validate these settings.
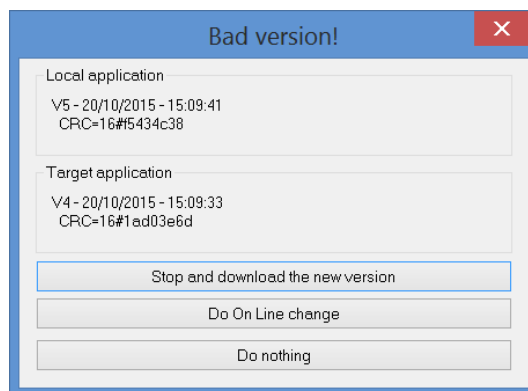
2. Make some changes and download the application

For test purposes, make a simple change first. Then, to make more complex changes in the application, see the restriction in the online help.

For instance add a simple line in a ST program

```
// New code
bTestOnlineChange += 1;
```

Then compile and connect to the straton runtime. When the following window appears, select "Do On Line Change"

New changes can be done, for example, disconnect and change the '+' in your ST program by a '-'.

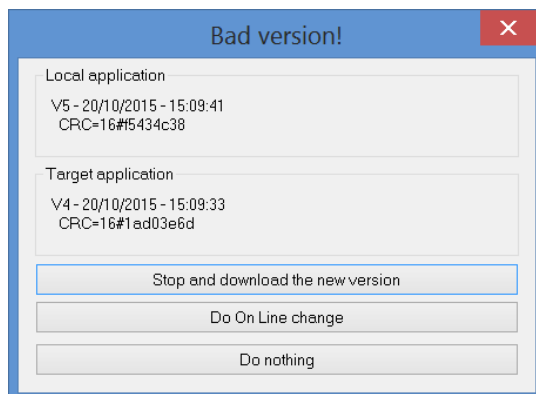For the new declared variables you should see the following attribute in the dictionary:

For deleted ones it should display:

3. Online change step by step

After connection to the runtime, you can select "Do nothing"

In that case the online change can be done later using the menu or the tool bar.

The tool bar will be displayed like that:

Select download (⟳) to download the latest application and after that choose to do online change (⇄) to validate the download.

If the result is

It means that the download is successful and the application starts correctly.

IMPORTANT NOTES:

To definitely validate an online change, stop and re-start your application manually (▶◀). Otherwise, if the device is powered off, at restart the runtime will not start the latest version of the "on line changed" application.

4. Limits of the online change

4.1. Allowed

▸ Change a ST/IL/LD or FBD program

▸ Change the condition of a SFC transition

▸ Change the actions of a SFC step

▸ Create, rename or delete global and local variables

▸ Create, rename or delete global and local function block instances

▸ Change the I/Os mapping (change I/O aliases)

4.2. Not Allowed

▸ Create, delete or rename a program

▸ Change SFC charts

▸ Change the local parameters and variables of a UDFB

▸ Change the type or dimension (or string length) of a variable or function block instance

▸ Change the set of I/O boards

▸ Change the definition of RETAIN variables