

Advantech AE Technical Share Document

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Category	■FAQ □SOP	Related OS	N/A
Abstract	CODESYS, How to create boot application in CODESYS		
Keyword	Boot application, EEPROM, RAM, Auto-start		
Related Product	ADAM-5560, APAX-5580		

■ **Problem Description:**

When using “Login” function in the CODESYS as shown in *Figure 1*, the user could connect



Figure 1

with PAC such as APAX-5580 and ADAM-5560 and run their program successfully.

However, if the customer reboots the power of PAC, they found that all of the downloaded programs are gone and need to manually download the program again.

Is there any solution to prevent this issue? How could user make CODESYS automatically run the project when the system is rebooted?

■ **Answer:**

In this document, we will explain how to create a boot application in CODESYS, and describe the difference of behavior between normal login download and creating a boot application. Detail setting procedures in CODESYS will also be covered.

As shown in *Figure 2*, when we downloading the compiled project to the PAC, actually we are downloading the compiled code into the RAM of PAC so it's impossible to save the program or value of variables after rebooting power of the platform.

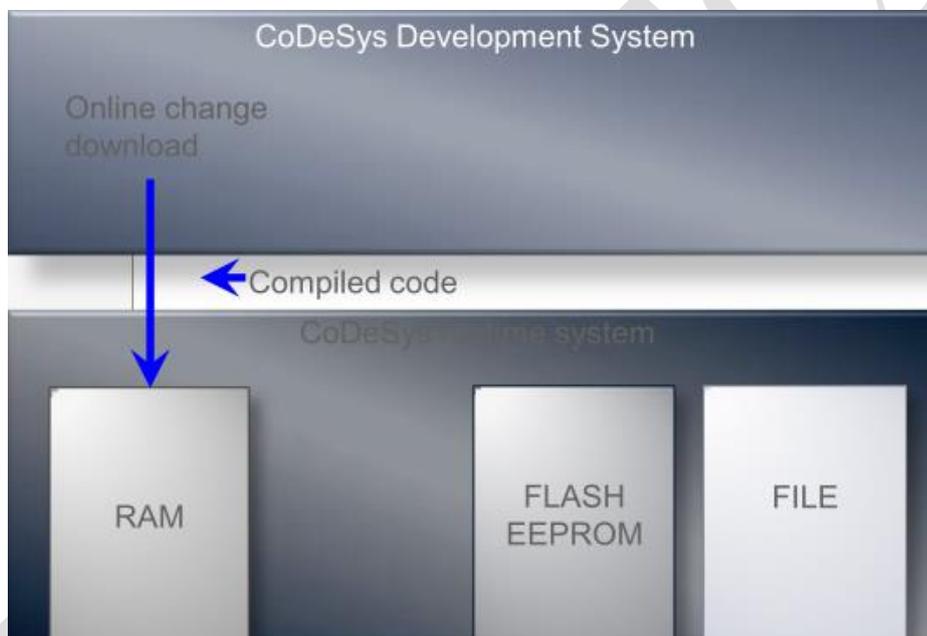


Figure 2

Create boot application, on the other hand, will download the project into EEPROM of PAC(Figure 3) so that related information will be automatically loaded into RAM when the system is rebooted.

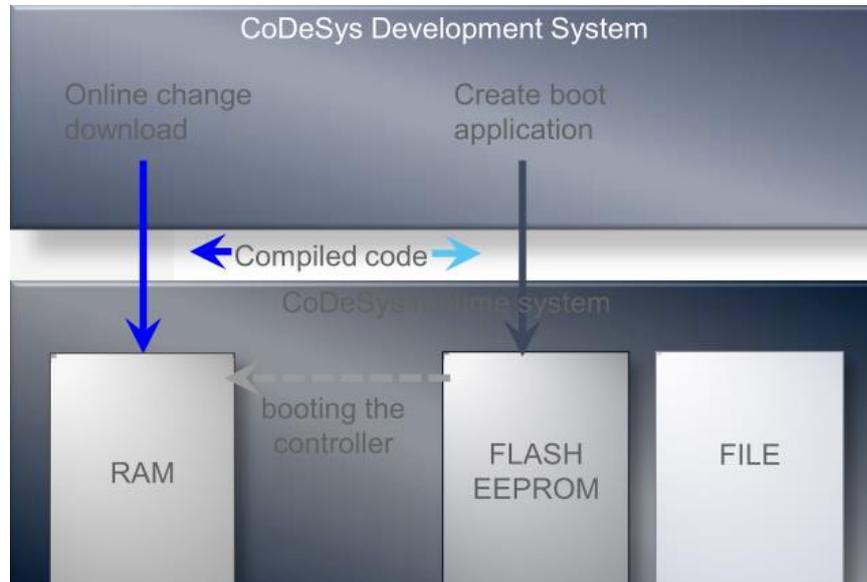


Figure 3

In order to create a boot application, first you need to login to your RTE, and then click “Online”→”Create boot application” (Figure 4)

- Please note that you must be online when creating boot application.

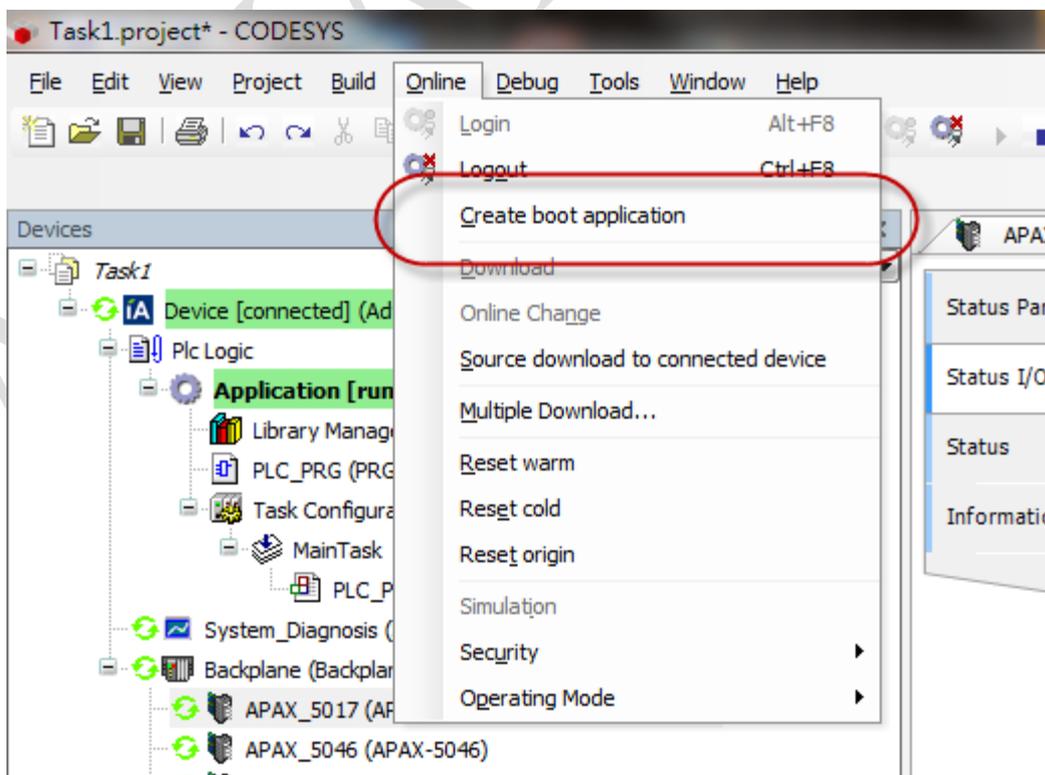


Figure 4

The user also needs to check the settings of RTE to make sure related functions are enabled. Please right click on the CODESYS cube icon, and select “PLC Configuration” (Figure 5)

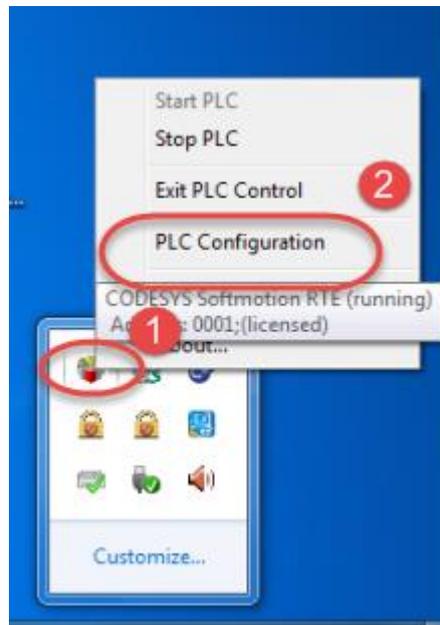


Figure 5

Please check both “Start RTE basic systemservice when booting” and “Start the PLC with the basic system service” are enable in the “Startup” tab. (Figure 6)

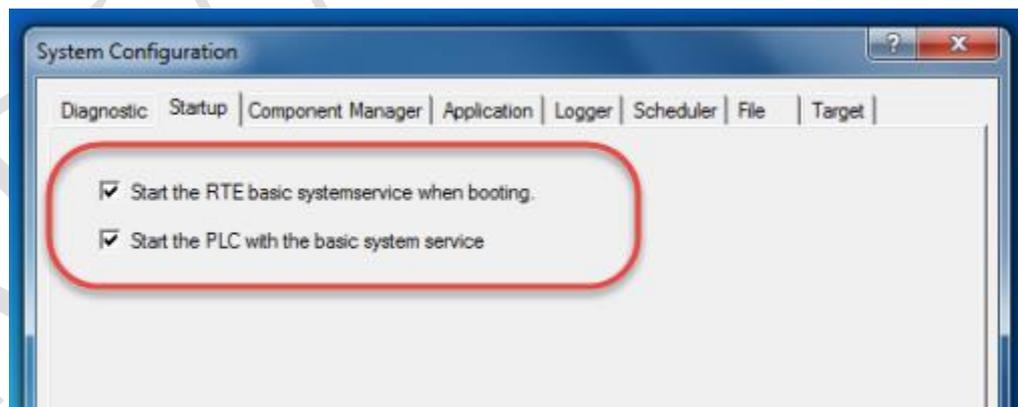


Figure 6