

Advantech SE Technical Share Document

Date	2020 / 05/ 28	Related Product	CODESYS	
Category	■FAQ □SOP □ Driver Tech Note			
Abstract	How to use CODESYS to stop and start application?			
Keyword	Application			
Related OS	Windows			
Revision History				
Date	Version	Author	Reviewer	Description
2020/05/28	V1.0	Owen.Chang	Nick.Liu	CODESYS SP15

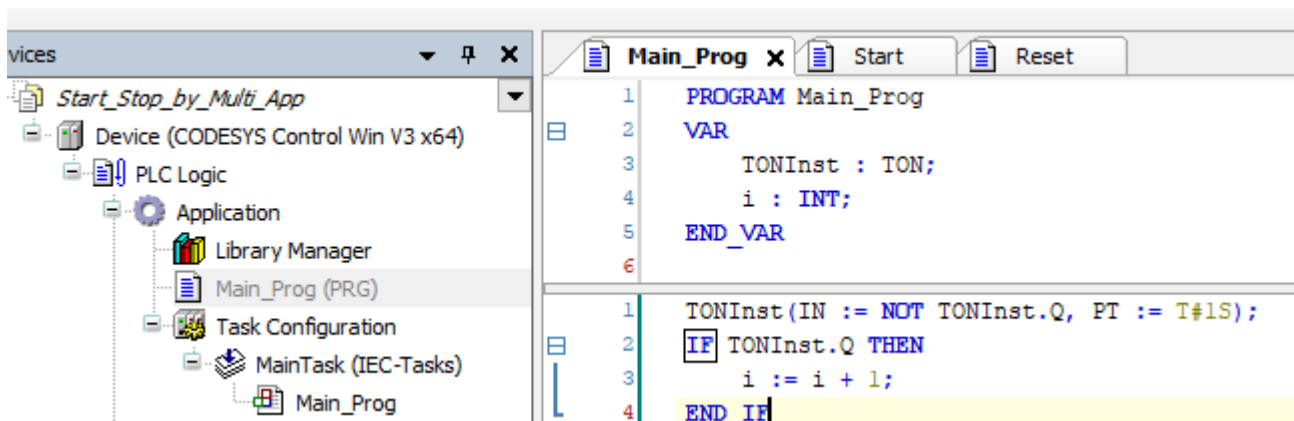
■ Problem Description & Architecture:

Sometimes customer want to use CODESYS to stop and start the application. This FAQ shows users how to do this.

■ Brief Solution - Step by Step:

CmpApp is the library which could get the application info and control them. **AppFindApplicationByName** could get the pointer of target application. Then, **AppStartApplication** with pointer could start application, and **AppReset** could reset application. Both these two function need to put another application which could monitor and control the main application where your code is running. The following is the sample code I wrote. Moreover, you could refer to attached project and video.

Application:



Application_1 (Active Application):

The screenshot displays the SIMATIC Manager interface. On the left, the 'Devices' tree shows the project structure: 'Start_Stop_by_Multi_App' -> 'Device (CODESYS Control Win V3 x64)' -> 'PLC Logic' -> 'Application' -> 'Application_1'. Under 'Application_1', 'Main_Prog (PRG)' is selected. On the right, the 'Main_Prog' editor shows the following code:

```

1  PROGRAM Start
2  VAR
3      xStart: BOOL;
4      pApp: POINTER TO APPLICATION;
5      Result: RTS_IEC_RESULT;
6  END_VAR

1  IF xStart THEN
2      pApp := AppFindApplicationByName
3          ( pszString := 'Application',
4            pResult := ADR(Result));
5      AppStartApplication(pApp);
6      xStart := FALSE;
7  END_IF
    
```

The screenshot displays the SIMATIC Manager interface. On the left, the 'Devices' tree shows the project structure: 'Start_Stop_by_Multi_App' -> 'Device (CODESYS Control Win V3 x64)' -> 'PLC Logic' -> 'Application' -> 'Application_1'. Under 'Application_1', 'Reset (PRG)' is selected. On the right, the 'Reset' editor shows the following code:

```

1  PROGRAM Reset
2  VAR
3      xReset: BOOL;
4      pApp: POINTER TO APPLICATION;
5      Result: RTS_IEC_RESULT;
6  END_VAR

1  IF xReset THEN
2      pApp := AppFindApplicationByName
3          ( pszString := 'Application',
4            pResult := ADR(Result));
5      AppReset(pApp, RTS_RESET);
6      xReset := FALSE;
7  END_IF
    
```

Reference:

N/A