

Switch off the precompilation

So that errors can already be displayed when coding in Codesys, there is the "precompiler", which underlines errors in the editors.



The precompiler does not generate any code!!!
Therefore, the message of the build process are the decisive ones

Unfortunately, there can be different displays between the precompilation and the actual compilation process (as demonstrated in the following example with the compiler version V3.5.16.30).

The screenshot shows the Siemens STEP 7 IDE. On the left, the 'Devices' tree is expanded to 'PLC_PRG (PRG)'. The main editor displays a ladder logic program for 'PLC_PRG'. The program includes a variable declaration section (VAR) and a logic section with conditional statements. A red box highlights the 'Precompile' button in the 'Messages' panel, which shows 'Total 1 error(s), 0 warning(s), 0 message(s)'. The error description is 'C0032: Cannot convert type 'BIT' to type 'INT''.

```
PROGRAM PLC_PRG
VAR
    ref1 : REFERENCE TO INT;
    i1 : INT := 1;
    xSwitch : BOOL;
    iCnt : INT;
END_VAR

IF NOT xSwitch THEN
    ref1 REF= 0;
ELSE
    ref1 REF= i1;
END_IF

IF __ISVALIDREF(ref1) THEN
    iCnt := iCnt + ref1;
END_IF
```

Messages - Total 1 error(s), 0 warning(s), 0 message(s)

Precompile 1 error(s)

Description

C0032: Cannot convert type 'BIT' to type 'INT'

It's a bug!!

The screenshot shows the same Siemens STEP 7 IDE environment. The 'Messages' panel now shows 'Total 1 error(s), 0 warning(s), 0 message(s)' after a successful build. The 'Build' button is highlighted in the 'Messages' panel. The error description is 'The application is up to date' and 'Build complete -- 0 errors, 0 warnings : Ready for download'.

```
PROGRAM PLC_PRG
VAR
    ref1 : REFERENCE TO INT;
    i1 : INT := 1;
    xSwitch : BOOL;
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END_VAR

IF NOT xSwitch THEN
    ref1 REF= 0;
ELSE
    ref1 REF= i1;
END_IF

IF __ISVALIDREF(ref1) THEN
    iCnt := iCnt + ref1;
END_IF
```

Messages - Total 1 error(s), 0 warning(s), 0 message(s)

Build 0 error(s)

Description

The application is up to date

Build complete -- 0 errors, 0 warnings : Ready for download

The generated code is OK

If desired, the precompiler can be switched off via the option "Tools\Options...\SmartCoding\Underline errors in the editor".

Options



- FBD, LD and IL editor
- Help
- International Settings
- Libraries
- Library download
- Load and Save
- Monitoring
- PLCopenXML
- Proxy Settings
- Refactoring
- Runtime Deploy Tool
- SFC editor
- SmartCoding**
- Store
- Text editor
- Visualization
- Visualization styles

SmartCoding

- ☒ Declare unknown variables automatically (AutoDeclare)
 - ☐ Enable for ST editor
- ☐ Show all instance variables in input assistant
- ☐ Show symbols from system libraries in input assistant
- ☒ List components after typing a dot (.)
 - ☐ List components immediately when typing
 - ☐ Insert with namespace
- ☒ Convert keywords to uppercase automatically (AutoFormat)
- ☒ Automatically list selection in cross reference view
- ☒ Underline errors in the editor
- ☒ Highlight symbols