K5 Validation tool

straton user guide – Rev. 5

sales@straton-plc.com

CP_R31_006_H

straton



STRATON AUTOMATION, All Rights Reserved

The information contained in this document is the property of STRATON AUTOMATION. The distribution and/or reproduction of all or part of this document in any form whatsoever is authorized only with the written authorization of STRATON AUTOMATION. The technical data are used only for the description of the product and do not constitute a guarantee of quality in the legal sense of the term. We reserve the right to make technical changes.

Content

1. **OVERVIEW** **4**

2. **REQUIREMENT AND SETUP** **4**

3. **RUNNING INSTRUCTION TESTS** **5**

4. **CREATING AND RUNNING TEST PROJECTS** **5**
   - 4.1. Test with K5VALID.EXE 6
   - 4.2. Test with K5VALPROJ.EXE 7

5. **FREQUENTLY ASKED QUESTIONS** **7**

1. Overview

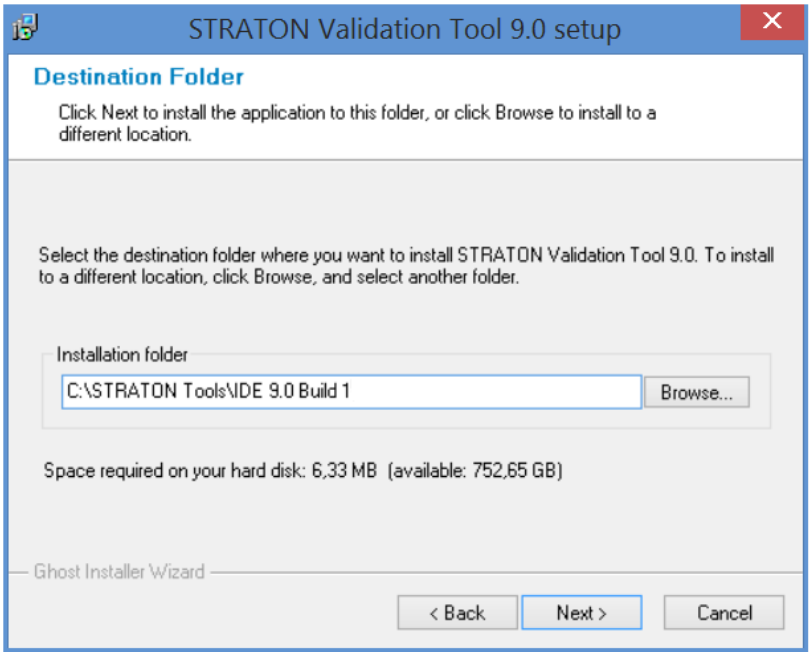
This document describes how to start with the straton Validation Tool.

2. Requirement and setup

The straton software validation tool is designed for OEMs that wants to automate the validation of the straton instruction set, create test applications and automate regression testing in order to identify changes that impact behavior.

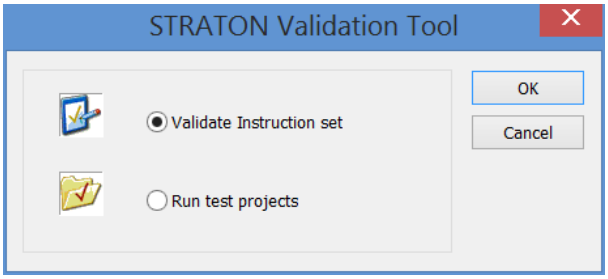
The validation can be done in the simulation tool integrated to the straton IDE or connected through TCP/IP or serial line with the real hardware platform.

Run *K5ValSetupxxx.exe* to install the validation tool. It must be installed IN THE SAME FOLDER as the straton IDE.

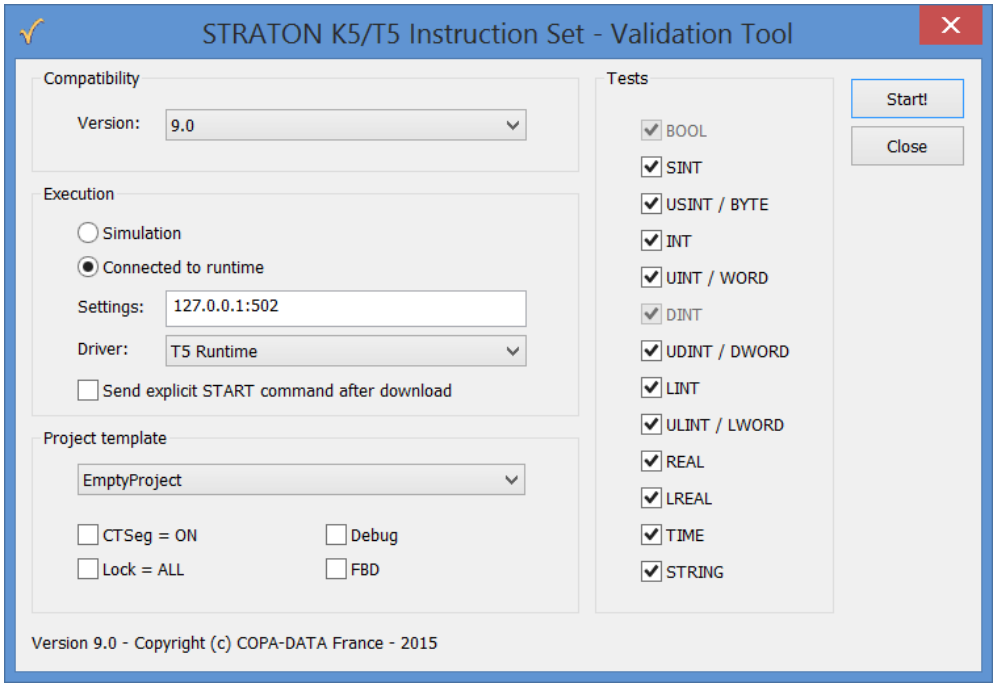


3. Running instruction tests

Run K5VALID.exe and select the option below:



Then enter connection settings, main options and select the data types supported by your runtime:



4. Creating and running test projects

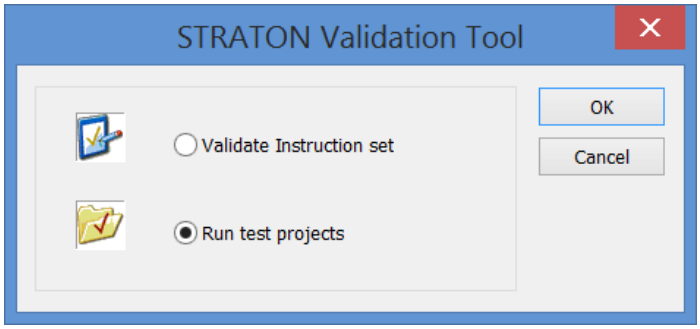
Principle: the idea is to store in the "Test Projects\" folder, where K5VALID is installed, a collection of straton projects to be run, exported in XML format.

Conventions:

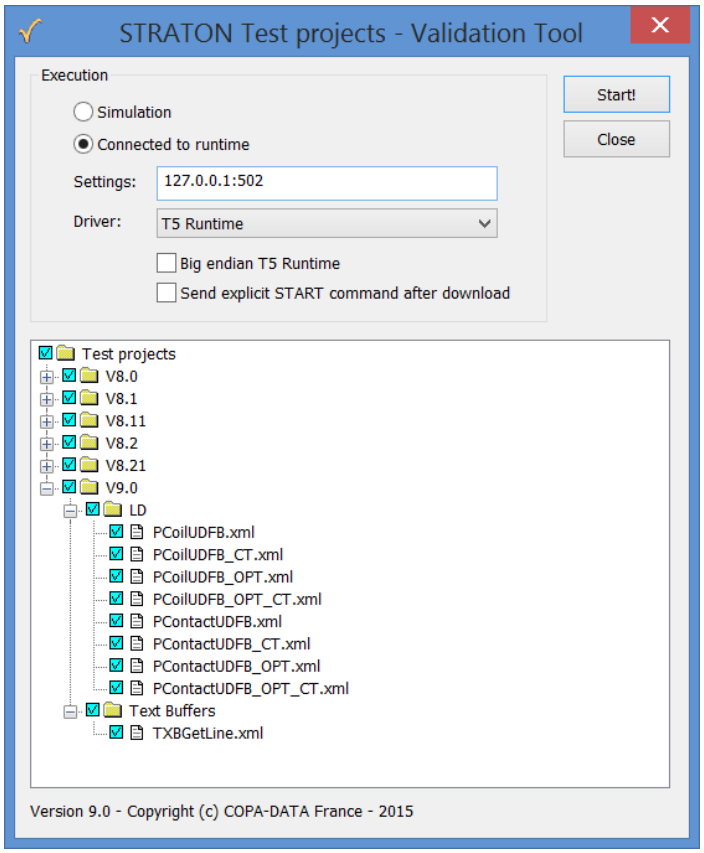
- The project should compile without errors
- The project should contain 2 BOOL global variables called "OK" and "FAIL"
- After some time one of these variables must become TRUE, this validates the test

4.1. Test with K5VALID.EXE

Run K5VALID and select the option below:



Then enter connection settings and select the set of projects to be run:



4.2. Test with K5VALPROJ.EXE

K5VALPROJ.EXE can be run from the Windows shell (CMD) to run one test project.

Syntax:

```
K5ValProj.exe <test_project_fullpath.xml> <config_fullpath.ini>
```

The .INI file contains main options and settings for running the test:

```
[RUN]
VERSION=1
PROJECTPATH=C:\TEMP -> folder where to restore the project (requires write access)
SIMULATE=OFF
DRIVER=K5NET5.DLL
SETTINGS=127.0.0.1:502 -> IP address and port of the runtime
EXPLICITSTART=OFF
BIDENDIAN=OFF -> should be ON if your runtime is big endian

[OUTPUT]
CONSOLE=ON -> output messages on the CMD window
FILE=C:\Docs\__K5VAL.TXT -> output of the report to a file
```

5. Frequently Asked Questions

I GET THE MESSAGE NO CONNECTION?

Check that the straton runtime is started and the communication IP and port.