

K5B Tool

straton user guide – Rev. 1

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straton



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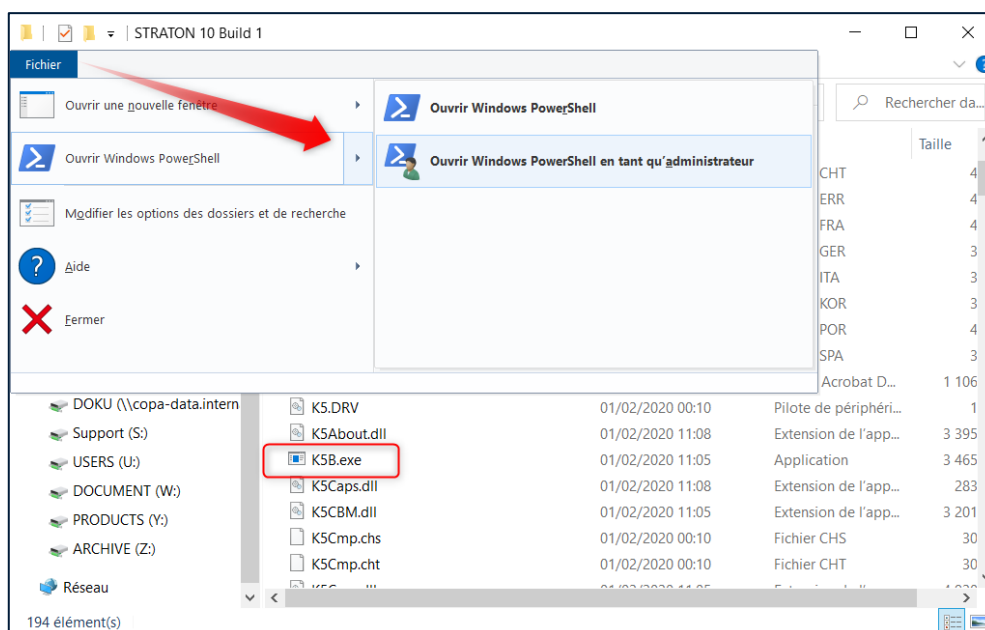
1. Overview

This document describes how to use the K5B functionality of straton.

2. How to use K5B ?

K5B can only be used thanks to a command prompt.

To use it, go in the folder where the K5B.exe is installed and open a command prompt or Windows PowerShell.



3. Commands to execute using the K5B tool

3.1. Basic commands

3.1.1. Build a project

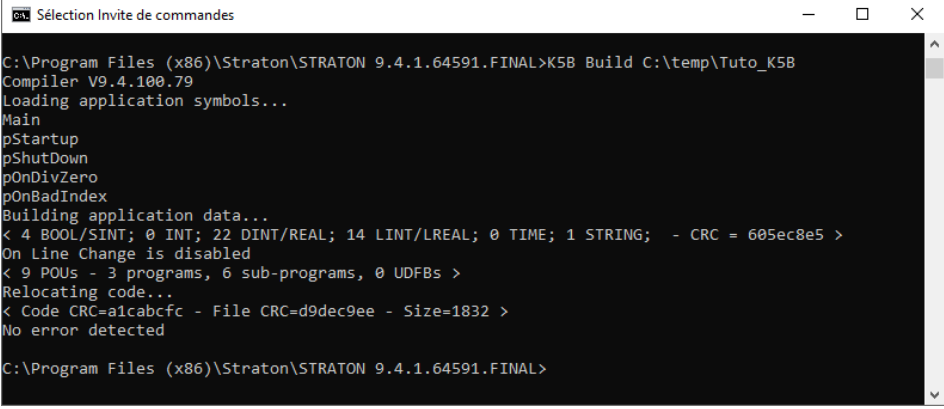
To execute basic commands on projects, the following commands can be used:

Build Project syntaxes:

```
K5B Build <ProjectPath>
K5B Build0 <ProjectPath>
```

See the [Arguments](#) section for how to use <ProjectPath> argument.

The “Build Project” command will build a project and show information about it, as well as errors or warnings if there are any during the compilation.



```
Sélection Invite de commandes

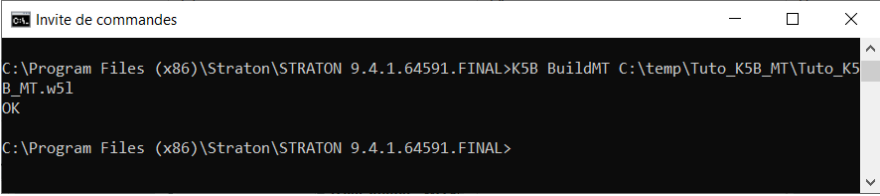
C:\Program Files (x86)\Straton\STRATON 9.4.1.64591.FINAL>K5B Build C:\temp\Tuto_K5B
Compiler V9.4.100.79
Loading application symbols...
Main
pStartup
pShutDown
pOnDivZero
pOnBadIndex
Building application data...
< 4 BOOL/SINT; 0 INT; 22 DINT/REAL; 14 LINT/LREAL; 0 TIME; 1 STRING; - CRC = 605ec8e5 >
On Line Change is disabled
< 9 POUs - 3 programs, 6 sub-programs, 0 UDFBs >
Relocating code...
< Code CRC=a1cabcf - File CRC=d9dec9ee - Size=1832 >
No error detected

C:\Program Files (x86)\Straton\STRATON 9.4.1.64591.FINAL>
```

Once compiled, the APPLI.XTI (for Intel processors) or APPLI.XTM (for ARM) is updated in the Project’s folder. This compiled file is the **t5.cod** which is executed by the Runtime, only the name changes!

Build Multitask project syntax: `K5B BuildMT <ProjectList.w5l>`

The “Build Multitask Project” command will build the selected project list:



```
Invite de commandes

C:\Program Files (x86)\Straton\STRATON 9.4.1.64591.FINAL>K5B BuildMT C:\temp\Tuto_K5B_MT\Tuto_K5B_MT.w5l
OK

C:\Program Files (x86)\Straton\STRATON 9.4.1.64591.FINAL>
```

3.1.2. Clean a project

Clean project syntax: `K5B Clean <ProjectPath>`

The “Clean Project” command will clean your project by removing all the files created by the compilation (_report.txt, APPLI.XTI, pStartup.RK5, ...). The aim of a “Clean Project” command is to :

- ▶ Ensure that the project is recompiled
- ▶ Clean the project in order to save the sources

3.2. Commands to Import/Export elements

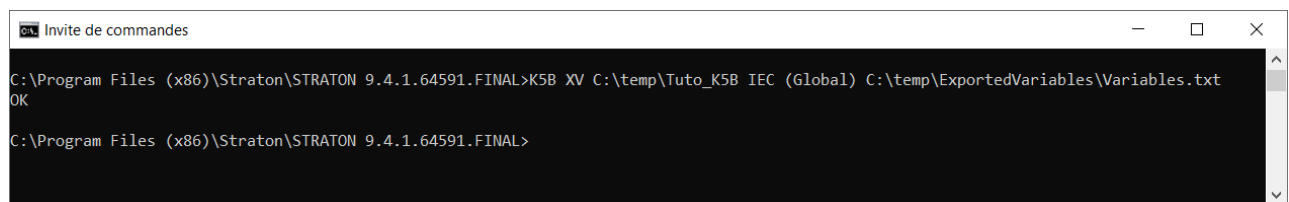
3.2.1. Export/Import variables

Here are the commands to import/export elements of a project:

Export/Import variables syntaxes: `K5B XV <ProjectPath> <Format> <Group> <ExpFile> //Export`

`K5B IV <ProjectPath> <Format> <Group> <ExpFile> //Import`

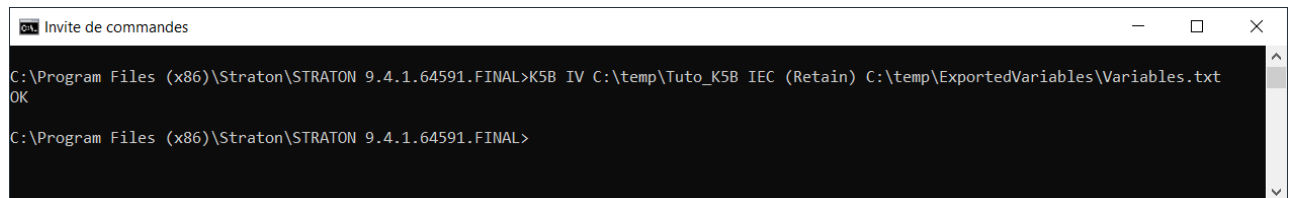
Example of an variables export from a project to a file:



```
Invite de commandes
C:\Program Files (x86)\Straton\STRATON 9.4.1.64591.FINAL>K5B XV C:\temp\Tuto_K5B IEC (Global) C:\temp\ExportedVariables\Variables.txt
OK
C:\Program Files (x86)\Straton\STRATON 9.4.1.64591.FINAL>
```

All the Global variables of the project "Tuto_K5B" have been exported in "Variables.txt" file.

Example of an variables import from a file to a project:



```
Invite de commandes
C:\Program Files (x86)\Straton\STRATON 9.4.1.64591.FINAL>K5B IV C:\temp\Tuto_K5B IEC (Retain) C:\temp\ExportedVariables\Variables.txt
OK
C:\Program Files (x86)\Straton\STRATON 9.4.1.64591.FINAL>
```

All the variables from the "Variables.txt" file have been imported in the project "Tuto_K5B".

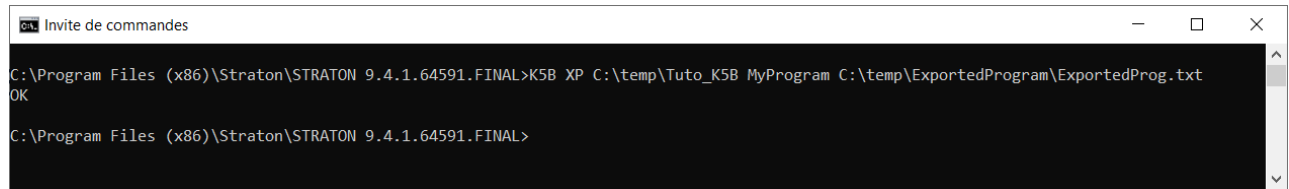
3.2.2. Export/Import program

Use the following syntaxes to export/import a program:

Export/Import program syntaxes: `K5B XP <ProjectPath> <Program> <ExpFile> //Export`

`K5B IP <ProjectPath> <ExpFile> //Import`

Example of a program export using K5B:



```
Invite de commandes
C:\Program Files (x86)\Straton\STRATON 9.4.1.64591.FINAL>K5B XP C:\temp\Tuto_K5B MyProgram C:\temp\ExportedProgram\ExportedProg.txt
OK
C:\Program Files (x86)\Straton\STRATON 9.4.1.64591.FINAL>
```

The program MyProgram of the "Tuto_K5B" project has been exported in the "ExportedProg.txt" file.

3.2.3. Export project

Here is the syntax to use to export a project in a different folder with K5B:

Export project syntax:

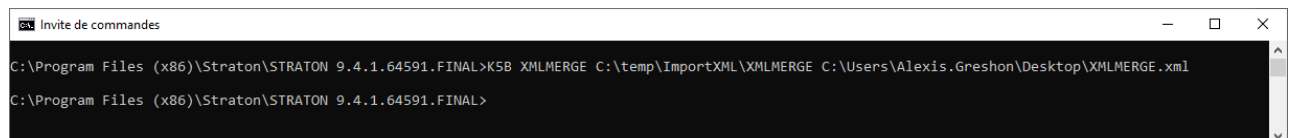
K5B X <ProjectPath> <XFormat> <ExpFile>

3.2.4. Import XML

To import an XML file, use the following syntax:

Import (XML) syntax:

K5B XMLMERGE <ProjectPath> <XmlFile>



```
Invite de commandes
C:\Program Files (x86)\Straton\STRATON 9.4.1.64591.FINAL>K5B XMLMERGE C:\temp\ImportXML\XMLMERGE C:\Users\Alexis.Greshon\Desktop\XMLMERGE.xml
C:\Program Files (x86)\Straton\STRATON 9.4.1.64591.FINAL>
```

Then, the XMLMERGE.xml file has been imported in the XMLMERGE project.

ATTENTION: To import a complete project, you **must** use a straton project base. This is available in the "Template > EmptyProject" folder where straton data is installed.

By default, it should be in: C:\Users\Public\Documents\Straton\STRATON X\Template

3.3. Additional commands on project

Here are some additional commands that can be used with the K5B:

- ▶ Update external objects: `K5B UPDEXT <ProjectPath>`
- ▶ Code checker: `K5B CODECHECK <ProjectPath> <outputfile.xml>`
- ▶ Compare projects: `K5B DIFF <Project1.xml> <Project2.xml>`
- ▶ List unsupported blocks: `K5B UNSUPFBS <ProjectPath>`
- ▶ Generate C FB code skeleton: `K5B WIZCFB <BlockName> [OutputFile]`

4. Arguments

Arguments list to use with K5B:

<code><ProjectPath></code>	Pathname of the project folder
<code><Searched></code>	Searched string
<code><Format></code>	"IEC" or "XML" or "CSV"
<code><Group></code>	"(Global)" or "(Retain)" or program/udfb name
<code><Program></code>	Program or UDFB name
<code><ExpFile></code>	Pathname of the import/export file
<code><XFormat></code>	"K5XML"
<code><BlockName></code>	Name of a C function or function block
<code><OutputFile></code>	Pathname of the file where to put the text

5. Frequently Asked Questions

WHERE TO FIND THE FULL LIST OF SUPPORTED FEATURES?

Additional K5B help can be displayed using the following command: `K5B -help`

```
C:\Program Files (x86)\Straton\STRATON 9.4.1.64591.FINAL>K5B -help
K5 Command Line - Version 9.4.001
(c) COPA-DATA France

Syntax:
  Build project:      K5B Build <ProjectPath>
                     K5B Build0 <ProjectPath>
  Build Multitask:    K5B BuildMT <ProjectList.w51>
  Clean project:      K5B Clean <ProjectPath>
  Find in files:      K5B Grep <ProjectPath> <Searched>
  Unused variables:   K5B Grep <ProjectPath> //Unused//
  Used libraries:     K5B Grep <ProjectPath> //Libs//
  Export variables:    K5B XV <ProjectPath> <Format> <Group> <ExpFile>
  Import variables:    K5B IV <ProjectPath> <Format> <Group> <ExpFile>
  Export program:      K5B XP <ProjectPath> <Program> <ExpFile>
  Import program:      K5B IP <ProjectPath> <ExpFile>
  Export project:      K5B X <ProjectPath> <XFormat> <ExpFile>
  Import (XML):        K5B XMLMERGE <ProjectPath> <XmlFile>
  Update ext. objs:    K5B UPDEXT <ProjectPath>
  Code checker:       K5B CODECHECK <ProjectPath> <outputfile.xml>
  Compare projects:    K5B DIFF <Project1.xml> <Project2.xml>
  Unsupported blocks:  K5B UNSUPFBS <ProjectPath>

Arguments:
  <ProjectPath>:      Pathname of the project folder
  <Searched>:         Searched string
  <Format>:            "IEC" or "XML" or "CSV"
  <Group>:             "(Global)" or "(Retain)" or program/udfb name
  <Program>:           Program or UDFB name
  <ExpFile>:           Pathname of the import/export file
  <XFormat>:           "K5XML"
```

CAN THE K5B.EXE BE USED AS STANDALONE?

No! Be careful, the K5B is using straton elements (like the compiler) to execute the different commands. It avoids opening the Editor but does not avoid installing it. The K5B.exe must be kept in its default installation folder.

Also note that if the Editor is not licensed, the application will be stamped in "Demo mode".