

ArchestrA Keyword Extractor User Manual

October 2014

Usage

The ArchestrA keyword extractor is used to extract values from an object exported csv file based on a keyword. It is best explained by example:

Let's say you have a composite object for an electrical motor and you want to export all the Tagname values, you will run the script by typing the script name followed by a space and the input csv file name (including path) followed by a space then the output file name (including the path) then a space and then the keyword Tagname. The same can be done for any keyword for example ShortDesc or PLCPath or Area or SecurityGroup etc. For examples see the "Example aaCSV Motor.csv" file (input file) and the "Example aaCSV Output.txt" file.

*Please note that the file format that is read have to be UTF-16-LE, this is the format that ArchestrA exports the csv files in.

Prerequisites

The script is written in Python version 3.4. Python 3.4 is an easy to use programming language that is available free to download and easy to install and work with. You will need the following:

1. Python 3.4 installed on your PC
2. Python added to your path
3. The aaCSV.py script
4. The exported CSV file for your object

Example

We want the Tagnames of a motor object in a list.

1.1 The CSV File

First we export our Motor object CSV file. For easy use I exported it to the C:\ root directory.

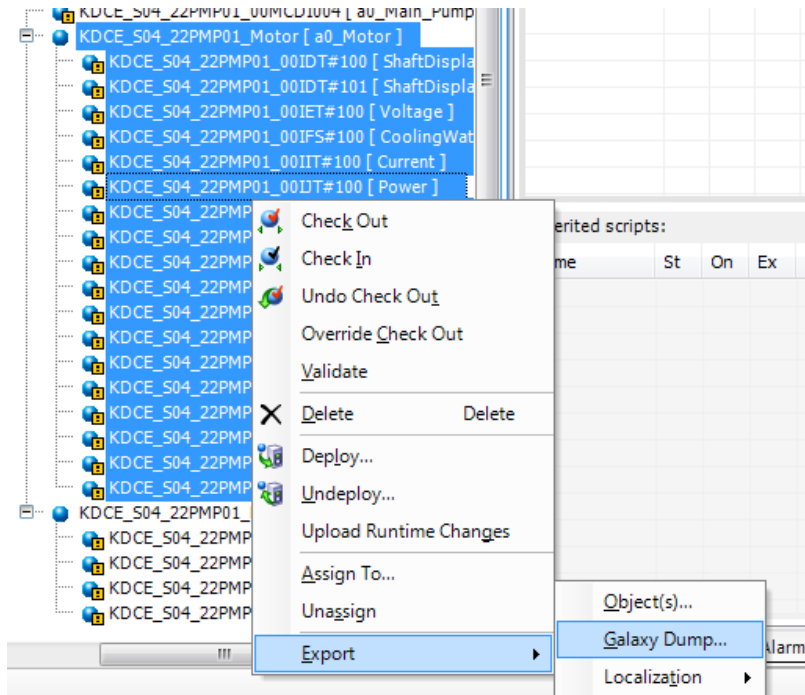


Figure 1.

It will look something like figure 2.

```
; Created on: 2014/10/23 06:15:32 AM from Galaxy: GoldfieldsSA

:TEMPLATE=$a0_MainPump_Machine.a0_Motor
:Tagname,Area,SecurityGroup,Container,ContainedName,ShortDesc,ExecutionRelativeOrder,ExecutionRelatedObject,UDAs,Extensions,Cmdl
KDCE_S04_22PMP01_Motor,KDCE_S04_L0022_PUMPS_PMP01,Default,KDCE_S04_22PMP01_Machine,a0_Motor,Kloof 4# Level 22 Pumps - Pump 1 Mo

:TEMPLATE=$a0_MainPump_Machine.a0_Motor.ShaftDisplacement_DE
:Tagname,Area,SecurityGroup,Container,ContainedName,ShortDesc,ExecutionRelativeOrder,ExecutionRelatedObject,UDAs,Extensions,Cmdl
KDCE_S04_22PMP01_00IDT#100,KDCE_S04_L0022_PUMPS_PMP01,Default,KDCE_S04_22PMP01_Motor,ShaftDisplacement_DE,Shaft Displacement Mo

:TEMPLATE=$a0_MainPump_Machine.a0_Motor.ShaftDisplacement_NDE
:Tagname,Area,SecurityGroup,Container,ContainedName,ShortDesc,ExecutionRelativeOrder,ExecutionRelatedObject,UDAs,Extensions,Cmdl
KDCE_S04_22PMP01_00IDT#101,KDCE_S04_L0022_PUMPS_PMP01,Default,KDCE_S04_22PMP01_Motor,ShaftDisplacement_NDE,Shaft Displacement Mo

:TEMPLATE=$a0_MainPump_Machine.a0_Motor.Voltage
:Tagname,Area,SecurityGroup,Container,ContainedName,ShortDesc,ExecutionRelativeOrder,ExecutionRelatedObject,UDAs,Extensions,Cmdl
KDCE_S04_22PMP01_00IET#100,KDCE_S04_L0022_PUMPS_PMP01,Default,KDCE_S04_22PMP01_Motor,Voltage,Voltage - Kloof 4# 22 Level Pump 1.

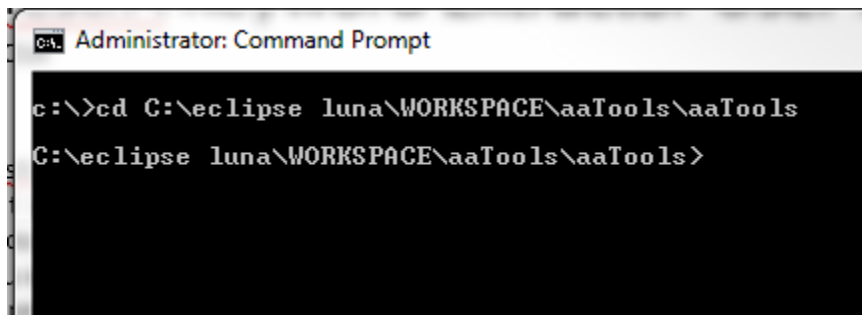
:TEMPLATE=$a0_MainPump_Machine.a0_Motor.CoolingWaterFlowSwitch
:Tagname,Area,SecurityGroup,Container,ContainedName,ShortDesc,ExecutionRelativeOrder,ExecutionRelatedObject,UDAs,Extensions,Cmdl
KDCE_S04_22PMP01_00IFS#100,KDCE_S04_L0022_PUMPS_PMP01,Default,KDCE_S04_22PMP01_Motor,CoolingWaterFlowSwitch,Cooling Water Flow !

:TEMPLATE=$a0_MainPump_Machine.a0_Motor.Current
:Tagname,Area,SecurityGroup,Container,ContainedName,ShortDesc,ExecutionRelativeOrder,ExecutionRelatedObject,UDAs,Extensions,Cmdl
KDCE_S04_22PMP01_00IIT#100,KDCE_S04_L0022_PUMPS_PMP01,Default,KDCE_S04_22PMP01_Motor,Current,Current - Kloof 4# 22 Level Pump 1.
```

Figure 2.

1.2 Run the program

Open up the command prompt and change the directory to the path where your aaCSV.py file resides.

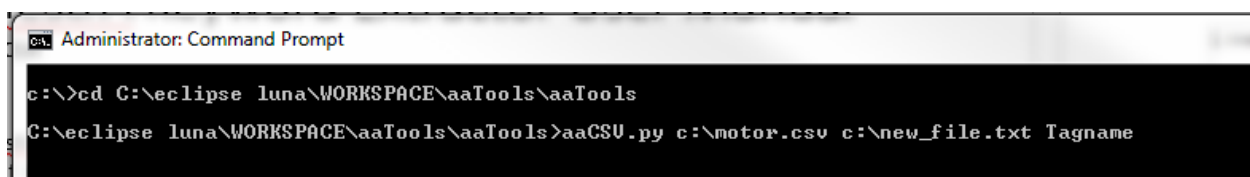


```
Administrator: Command Prompt

C:\>cd C:\eclipse luna\WORKSPACE\aaTools\aaTools
C:\eclipse luna\WORKSPACE\aaTools\aaTools>
```

Figure 3.

Type in the program name followed by the CSV file followed by the new file name you want and followed by the keyword. See figure 4.

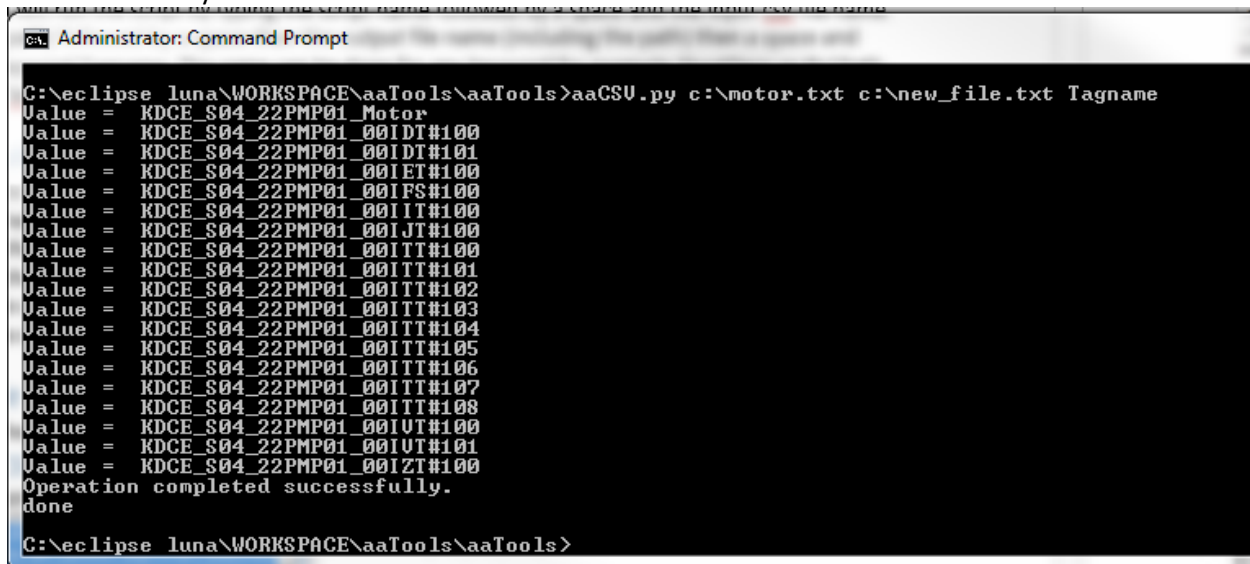


```
Administrator: Command Prompt

C:\>cd C:\eclipse luna\WORKSPACE\aaTools\aaTools
C:\eclipse luna\WORKSPACE\aaTools\aaTools>aaCSU.py c:\motor.csv c:\new_file.txt Tagname
```

Figure 4.

Press enter and your file will be created.



```
Administrator: Command Prompt

C:\eclipse luna\WORKSPACE\aaTools\aaTools>aaCSU.py c:\motor.txt c:\new_file.txt Tagname
Value = KDCE_S04_22PMP01_Motor
Value = KDCE_S04_22PMP01_00IDT#100
Value = KDCE_S04_22PMP01_00IDT#101
Value = KDCE_S04_22PMP01_00IET#100
Value = KDCE_S04_22PMP01_00IFS#100
Value = KDCE_S04_22PMP01_00IIT#100
Value = KDCE_S04_22PMP01_00IJT#100
Value = KDCE_S04_22PMP01_00ITT#100
Value = KDCE_S04_22PMP01_00ITT#101
Value = KDCE_S04_22PMP01_00ITT#102
Value = KDCE_S04_22PMP01_00ITT#103
Value = KDCE_S04_22PMP01_00ITT#104
Value = KDCE_S04_22PMP01_00ITT#105
Value = KDCE_S04_22PMP01_00ITT#106
Value = KDCE_S04_22PMP01_00ITT#107
Value = KDCE_S04_22PMP01_00ITT#108
Value = KDCE_S04_22PMP01_00IUT#100
Value = KDCE_S04_22PMP01_00IUT#101
Value = KDCE_S04_22PMP01_00IZT#100
Operation completed successfully.
done
C:\eclipse luna\WORKSPACE\aaTools\aaTools>
```

Figure 5.

The new_file.txt file contents will look like this:

new1.txt | motor.txt | Untitled * | motor1.c

```
KDCE_S04_22PMP01_Motor
KDCE_S04_22PMP01_00IDT#100
KDCE_S04_22PMP01_00IDT#101
KDCE_S04_22PMP01_00IET#100
KDCE_S04_22PMP01_00IFS#100
KDCE_S04_22PMP01_00IIT#100
KDCE_S04_22PMP01_00IJT#100
KDCE_S04_22PMP01_00ITT#100
KDCE_S04_22PMP01_00ITT#101
KDCE_S04_22PMP01_00ITT#102
KDCE_S04_22PMP01_00ITT#103
KDCE_S04_22PMP01_00ITT#104
KDCE_S04_22PMP01_00ITT#105
KDCE_S04_22PMP01_00ITT#106
KDCE_S04_22PMP01_00ITT#107
KDCE_S04_22PMP01_00ITT#108
KDCE_S04_22PMP01_00IVT#100
KDCE_S04_22PMP01_00IVT#101
KDCE_S04_22PMP01_00IZT#100
```

Figure 6.

That is it. All my tag names in a list one under the other, I can now use it in excel or for whatever I want to.

End.