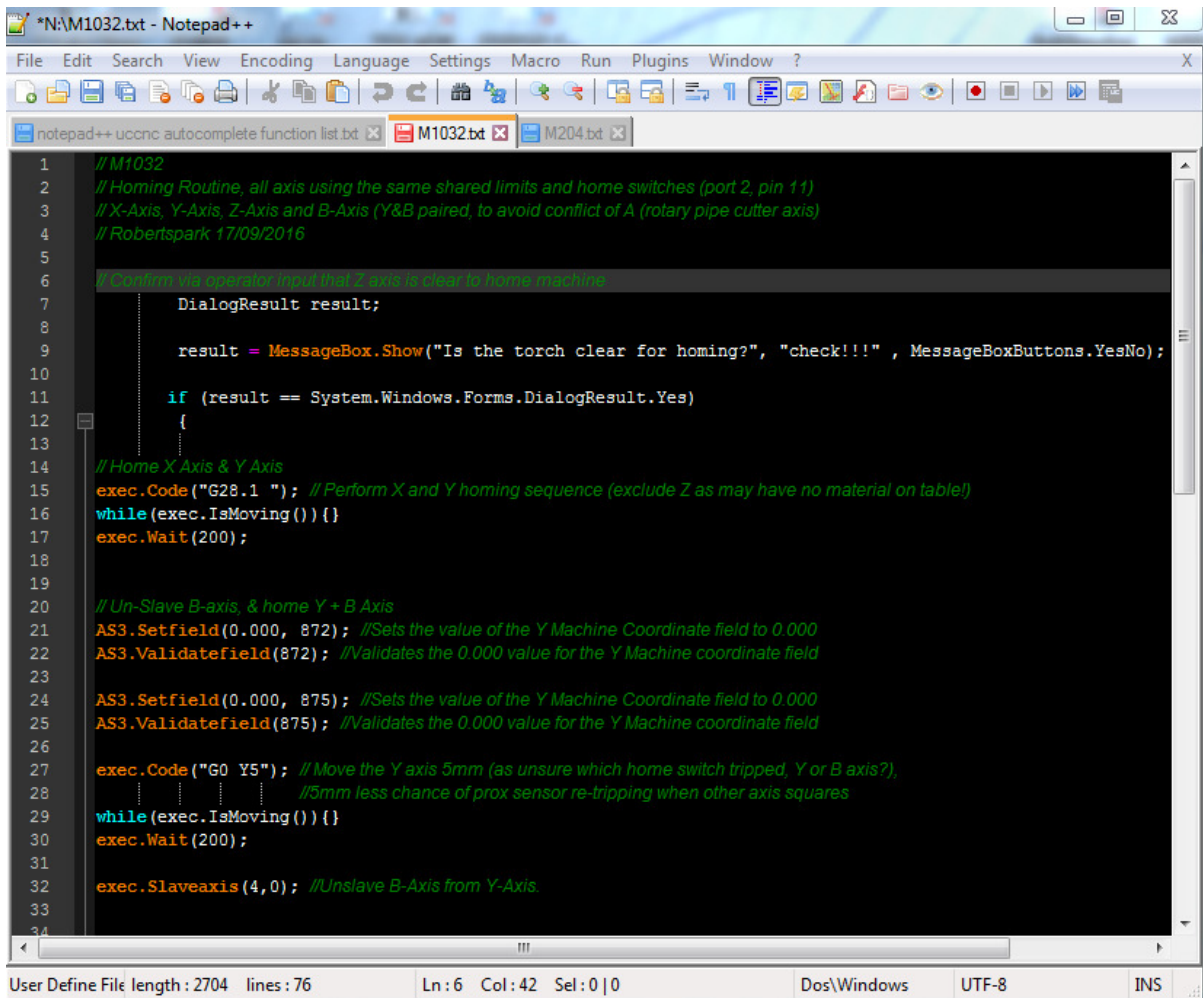


UCCNC NOTEPAD++ AUTOCOMPLETE + STYLE ADDIN

VERSION 1.0 (26/09/2016)

UCCNC version 1.2022

Robertspark



The screenshot shows the Notepad++ application window with the file *N:\M1032.txt open. The menu bar includes File, Edit, Search, View, Encoding, Language, Settings, Macro, Run, Plugins, Window, and ?. The toolbar contains various icons for file operations and editing. The status bar at the bottom displays 'User Define File length : 2704 lines : 76', 'Ln : 6 Col : 42 Sel : 0 | 0', 'Dos\Windows', 'UTF-8', and 'INS'. The main text area contains a CNC program with the following code:

```
1 // M1032
2 // Homing Routine, all axis using the same shared limits and home switches (port 2, pin 11)
3 // X-Axis, Y-Axis, Z-Axis and B-Axis (Y&B paired, to avoid conflict of A (rotary pipe cutter axis)
4 // Robertspark 17/09/2016
5
6 // Confirm via operator input that Z axis is clear to home machine
7     DialogResult result;
8
9     result = MessageBox.Show("Is the torch clear for homing?", "check!!!", MessageBoxButtons.YesNo);
10
11     if (result == System.Windows.Forms.DialogResult.Yes)
12     {
13
14         // Home X Axis & Y Axis
15         exec.Code("G28.1 "); // Perform X and Y homing sequence (exclude Z as may have no material on table!)
16         while(exec.IsMoving()) {}
17         exec.Wait(200);
18
19
20         // Un-Slave B-axis, & home Y + B Axis
21         AS3.Setfield(0.000, 872); //Sets the value of the Y Machine Coordinate field to 0.000
22         AS3.Validatefield(872); //Validates the 0.000 value for the Y Machine coordinate field
23
24         AS3.Setfield(0.000, 875); //Sets the value of the Y Machine Coordinate field to 0.000
25         AS3.Validatefield(875); //Validates the 0.000 value for the Y Machine coordinate field
26
27         exec.Code("G0 Y5"); // Move the Y axis 5mm (as unsure which home switch tripped, Y or B axis?),
28         // 5mm less chance of prox sensor re-tripping when other axis squares
29         while(exec.IsMoving()) {}
30         exec.Wait(200);
31
32         exec.Slaveaxis(4,0); //Unslave B-Axis from Y-Axis.
33
34
```

Introduction:

The addin is in two parts, a “Language Style” (UCCNC Style.XML) and an “Autocomplete” (UCCNC.XML) addin file.

Both files are XML files.

Pre-requisite:

You will need to download and install Notepad++ from the following download link, and follow the setup routine to install Notepad++ on your machine.

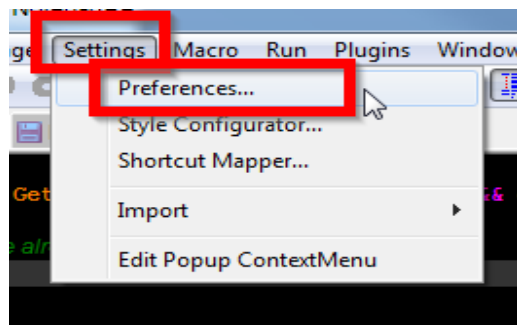
<https://notepad-plus-plus.org/>

Autocomplete file:

To install the Autocomplete file (UCCNC.XML), copy it from wherever you extracted the two files to, and navigate to the following default Notepad++ folder, and paste the file within there:

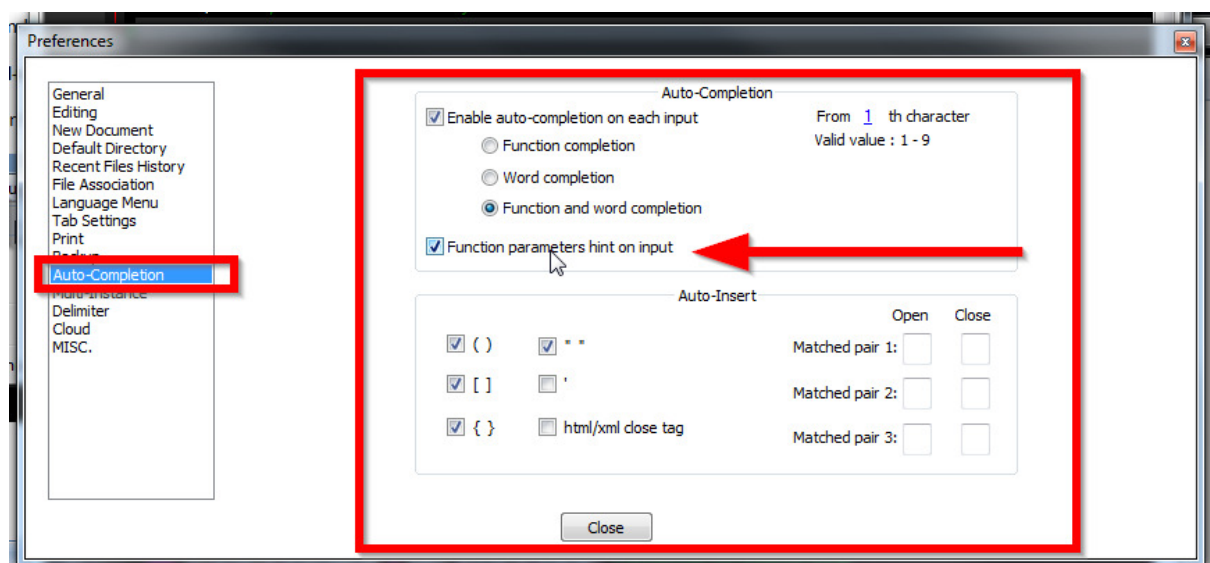
C:\Program Files (x86)\Notepad++\plugins\APIs

Then, Start Notepad++ >> select “Settings” menu, and then “Preferences”



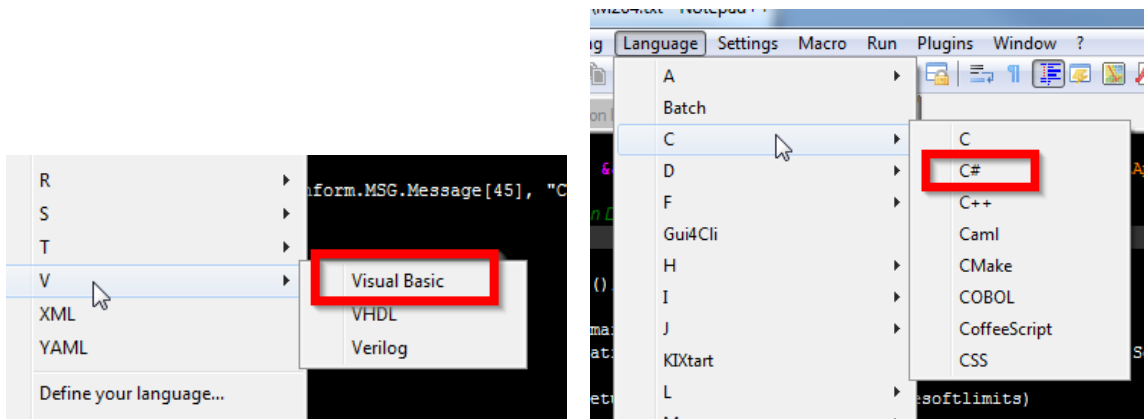
Select “Auto-Completion” from the listbox, and ensure that the settings are similar to the screenshot. The “function parameters on input” checkbox will provide the hints from the installed UCCNC.XML file for the UCCNC macro functions.

Other useful features on this page are the auto-insert for brackets etc.



Language Style:

By default, Notepad++ installs a number of default computer language styles, one of which is VB (Visual Basic) and another is C# (C Sharp). The Language style basically allows for Notepad++ to format the colours of the different functions and operators according to your personal preferences.



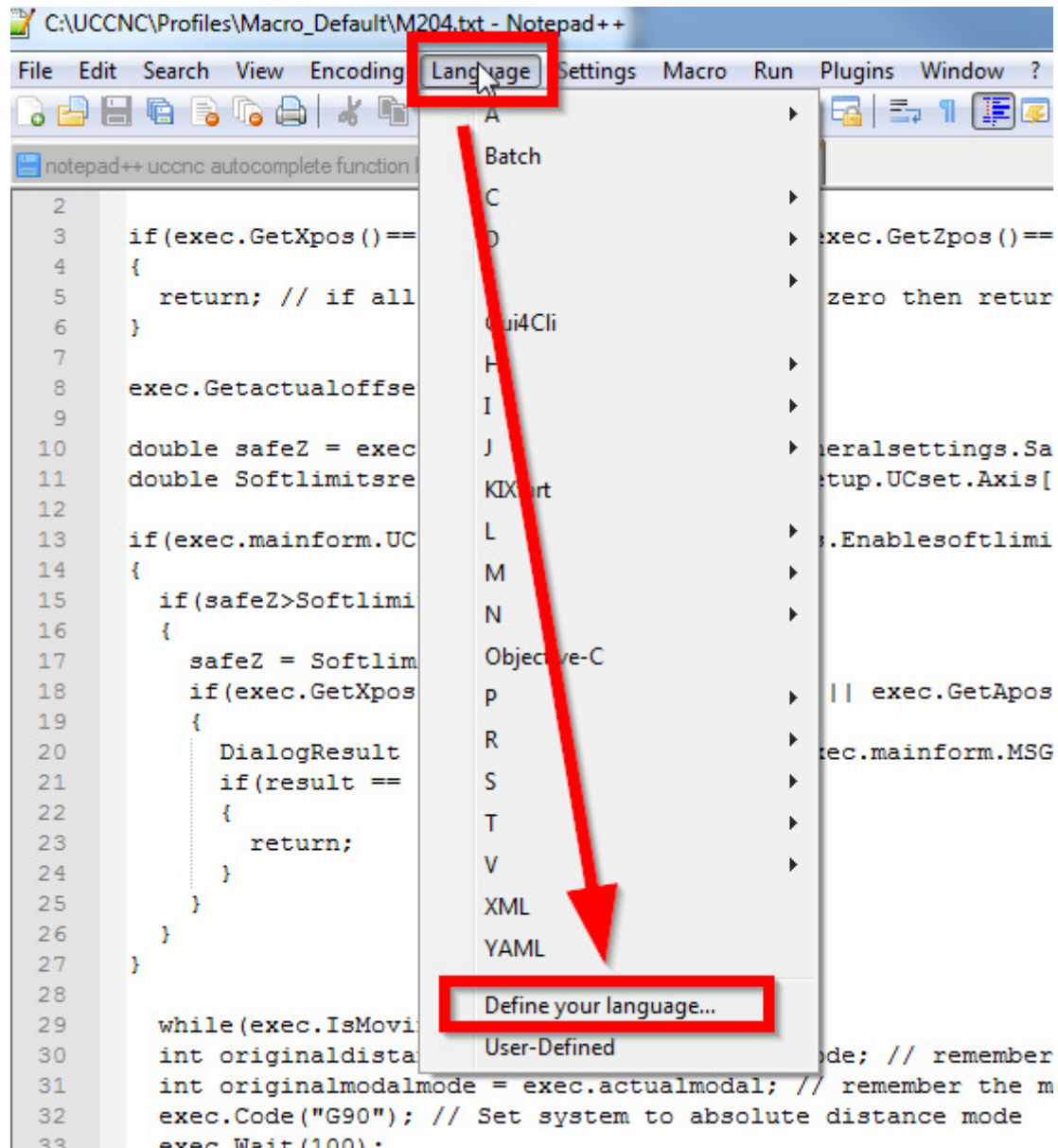
This being said, my personal preference is for a black screenset as shown in the images within this document.

I would suggest either you change your screenset to a black background by following the following instructions or change the Language Styles to the readable colours of your choosing. I do not believe I suffer from colour blindness, but it may be beneficial for differing colours of contrast should that be desirable. (black background tends to have less eyestrain in my opinion).

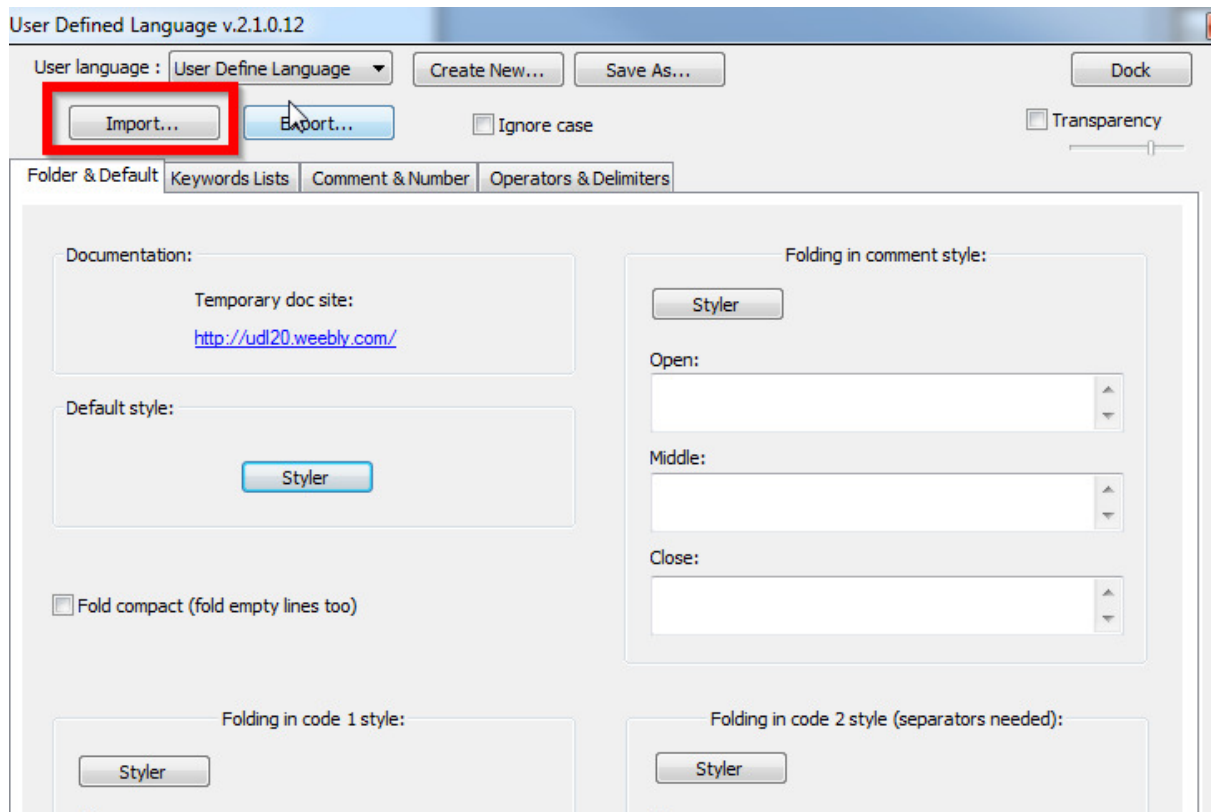
Installing the Language Style File:

Please note, I'd suggest doing this even if you don't like my personal choice of colours as you can format the colours later, but the functions (uccnc ones), and c# datatypes, operators etc are already listed within the Language Style file.

Start Notepad++ >> go to the "Language" menu, and select "Define Your Language" at the bottom of the list. The following screen will appear:



Select “Import” and navigate to wherever you extracted the two XML files to



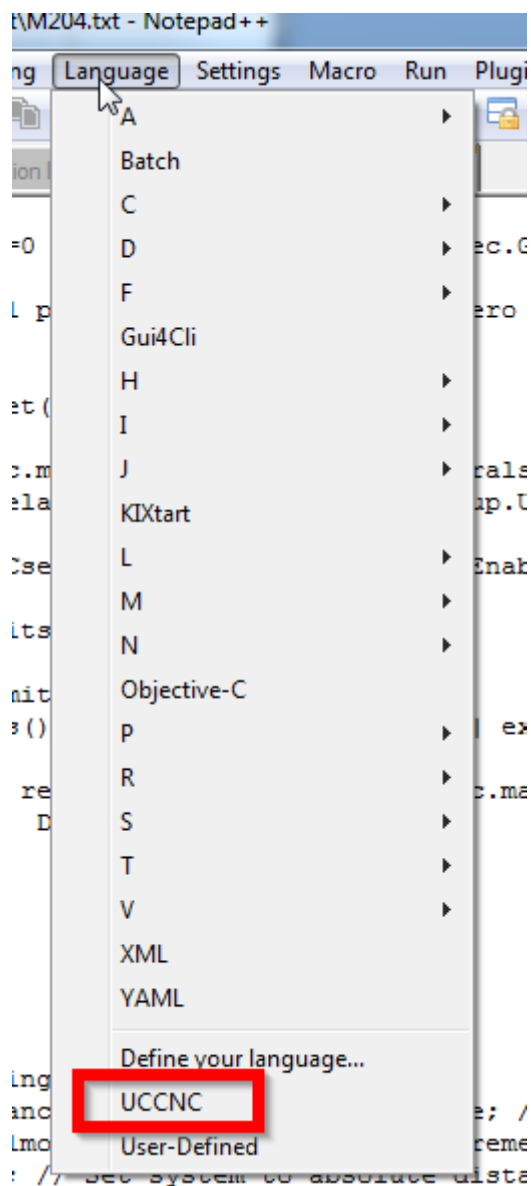
Select the file with the following file name: “UCCNC style.xml”

And a messagebox should popup saying “Import successful.”

Press “OK”

Then restart Notepad++

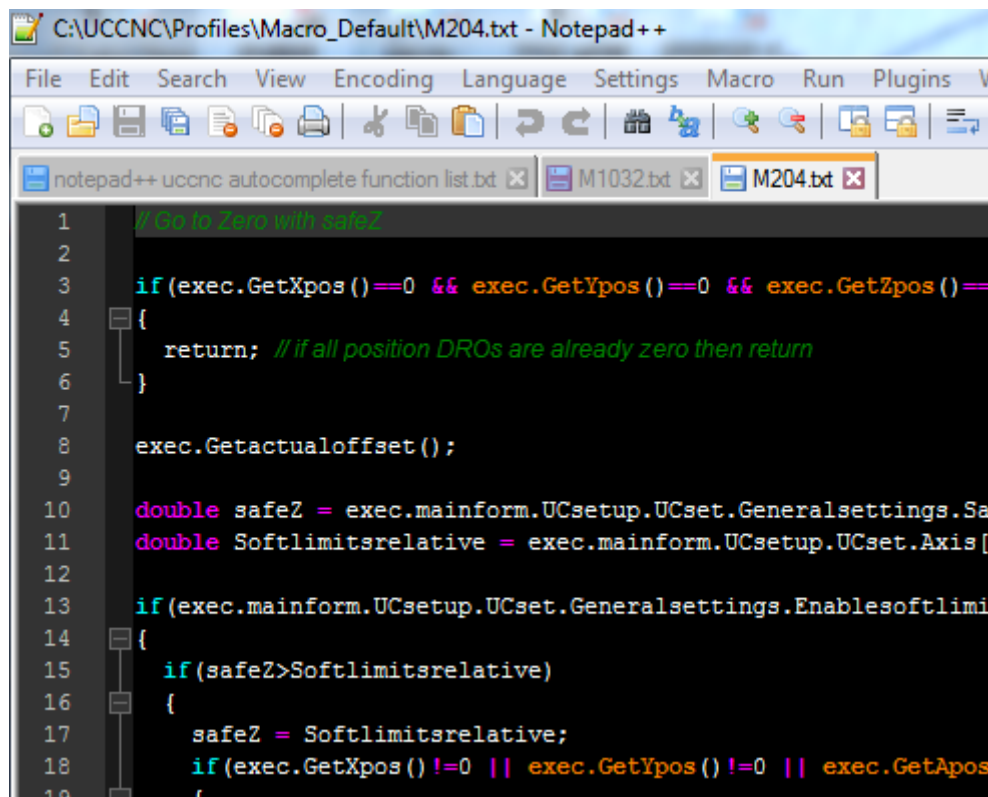
Then, if you click on the “Language” menu, at the bottom of the list will be UCCNC.



Open a file (such as **M204.txt**), by navigating to the "C:\UCCNC\Profiles\Macro_Default"

(or other location / profile, should you have changed it from the default at time of installation)

And the macro should appear as follows (providing you have completed Option 1 below for changing the screenset theme):

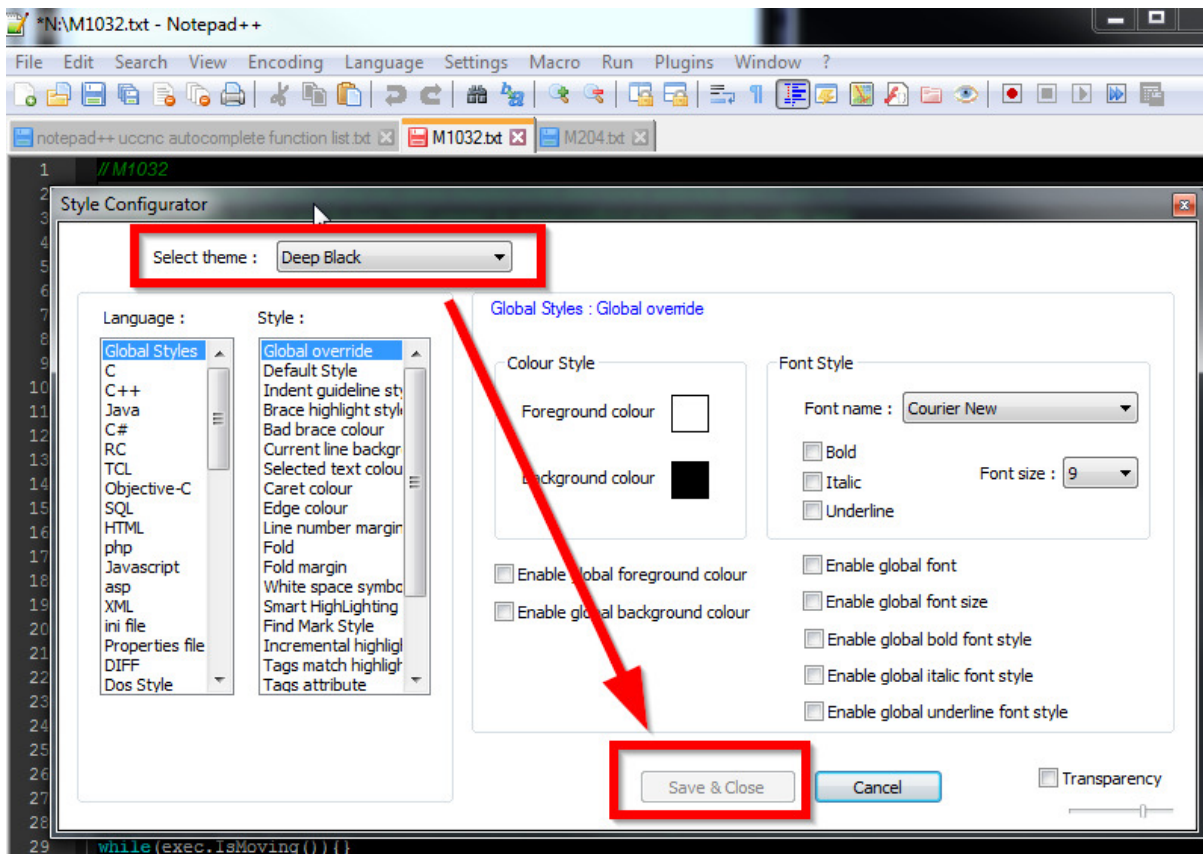
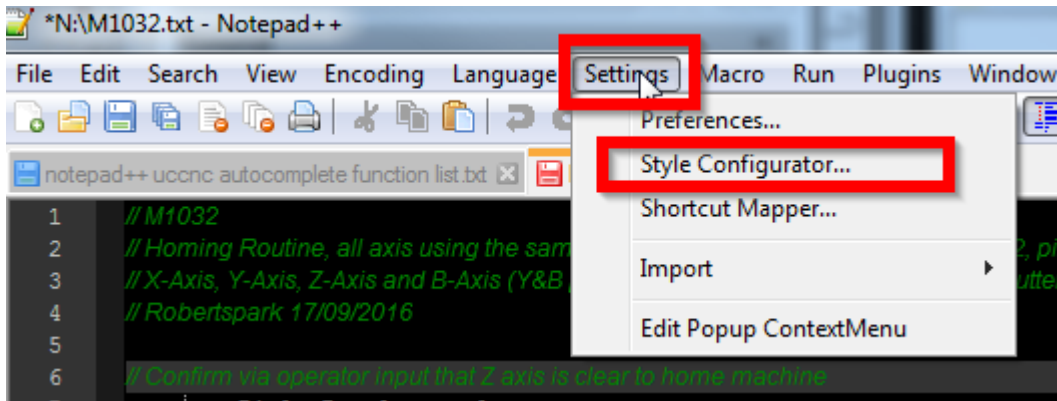
A screenshot of the Notepad++ application window. The title bar reads "C:\UCCNC\Profiles\Macro_Default\M204.txt - Notepad++". The menu bar includes File, Edit, Search, View, Encoding, Language, Settings, Macro, Run, and Plugins. The toolbar contains various icons for file operations and editing. The tab bar shows three open files: "notepad++ uccnc autocomplete function list.txt", "M1032.txt", and "M204.txt". The main text area displays the content of M204.txt, which is a macro script. The script starts with a comment "Go to Zero with safeZ" on line 1. It then has an if-statement on line 3: "if(exec.GetXpos()==0 && exec.GetYpos()==0 && exec.GetZpos()==0)". This is followed by a block on lines 4-6: "{ return; // if all position DROs are already zero then return }". On line 8, there is a call to "exec.Getactualoffset();". On line 10, a variable is assigned: "double safeZ = exec.mainform.UCsetup.UCset.Generalsettings.SafeZ;". On line 11, another variable is assigned: "double Softlimitsrelative = exec.mainform.UCsetup.UCset.AxisLimits[0];". On line 13, there is an if-statement: "if(exec.mainform.UCsetup.UCset.Generalsettings.Enablesoftlimits)". This is followed by a block on lines 14-18: "{ if(safeZ>Softlimitsrelative) { safeZ = Softlimitsrelative; if(exec.GetXpos()!=0 || exec.GetYpos()!=0 || exec.GetZpos()!=0) {". The text is color-coded: comments are green, keywords like 'if', 'double', and 'return' are blue, and function names like 'exec.GetXpos()' are red.

Option 1 – Changing the screenset Theme:

Start Notepad++ >> go to “Settings” menu >> select “Style Configurator...”

From the dropdown menu at the top “Select theme”, select “Deep Black”

Then save & close.

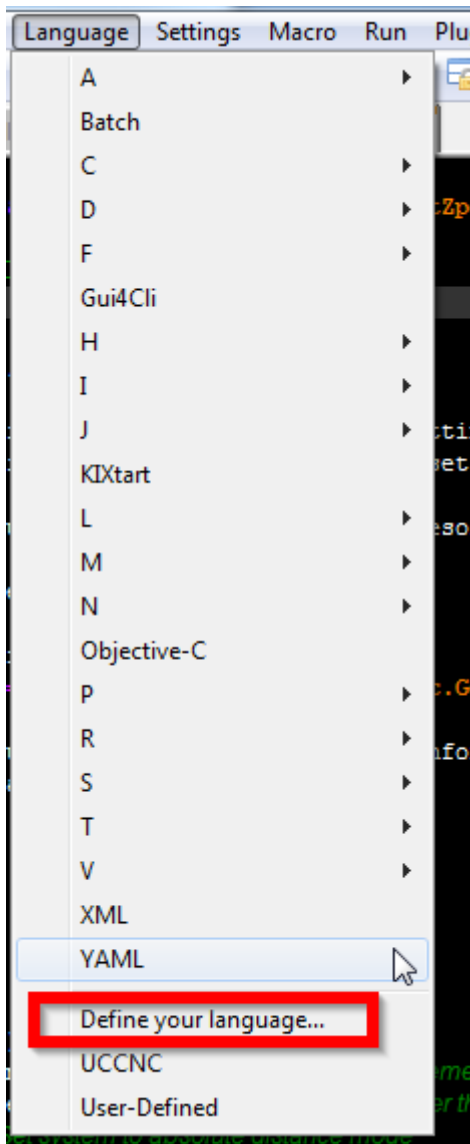


Option 2 – Changing the Language Style:

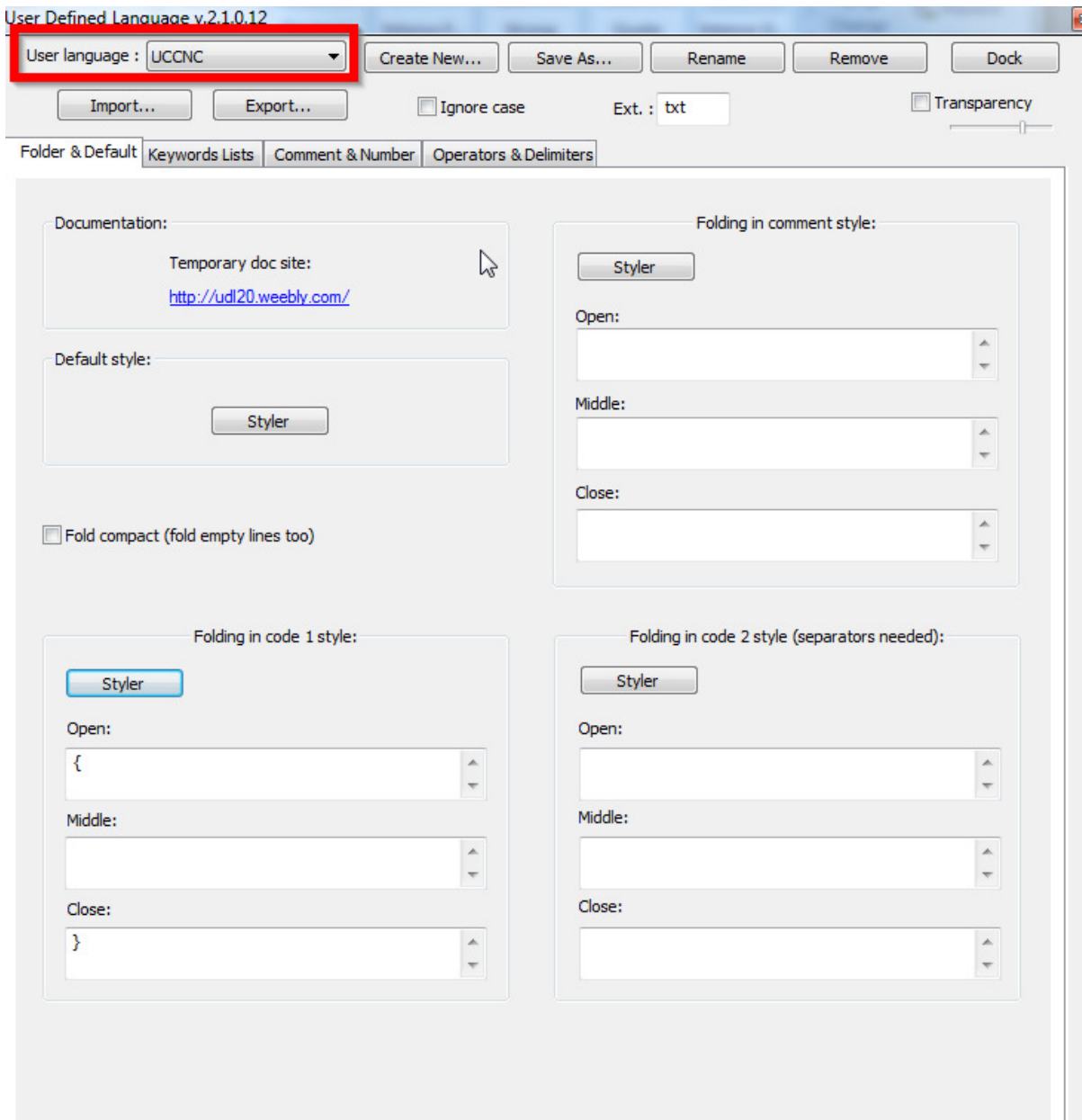


Tip: Please note, one disadvantage of changing the Language Style this way is if in the future UCCNC update / add additional functions to their Macro_capability_detailed.htm file, these will need to be added manually because if you remove the UCCNC Language Style and re-import the updated one, all styles will need reconfiguring.

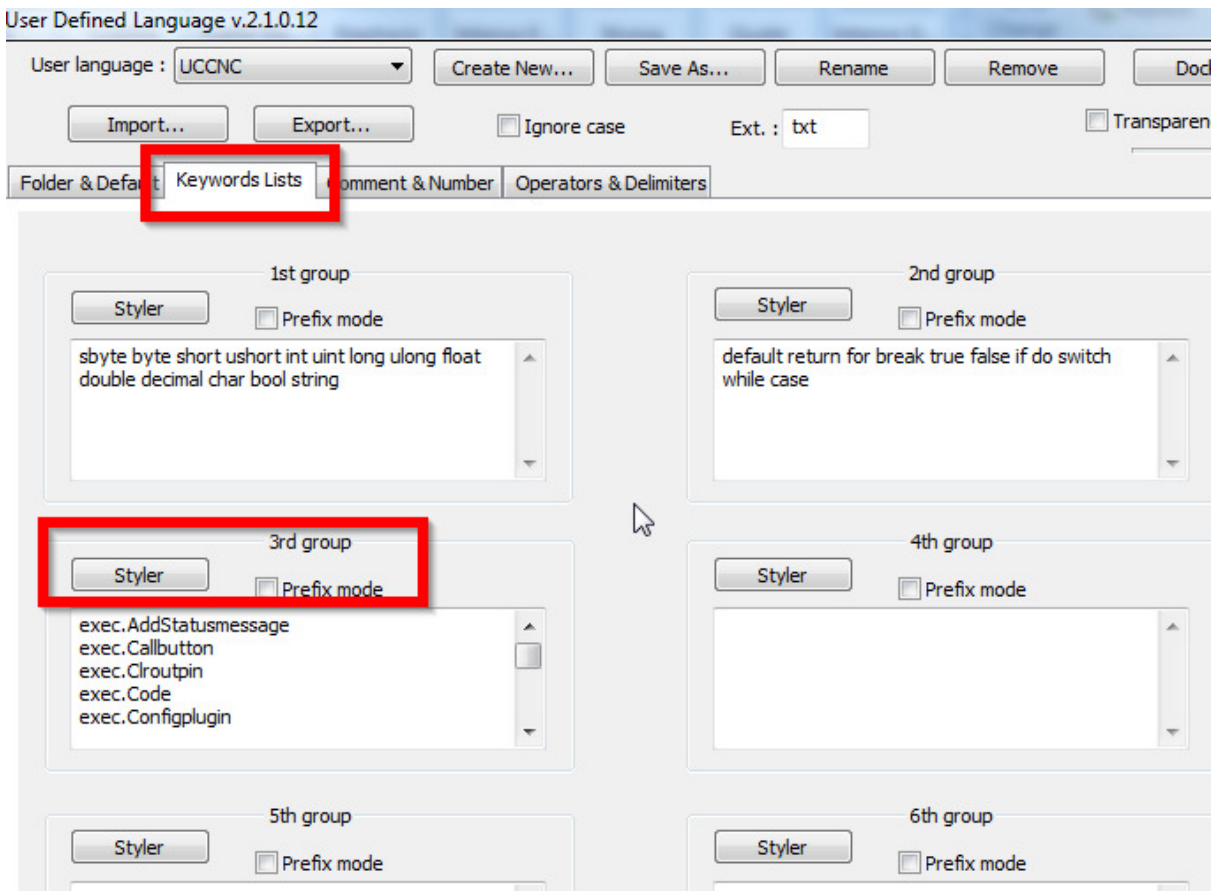
Click on the “Language” menu, and select “Define your language...”



Select User Language “UCCNC” from the dropdown menu.

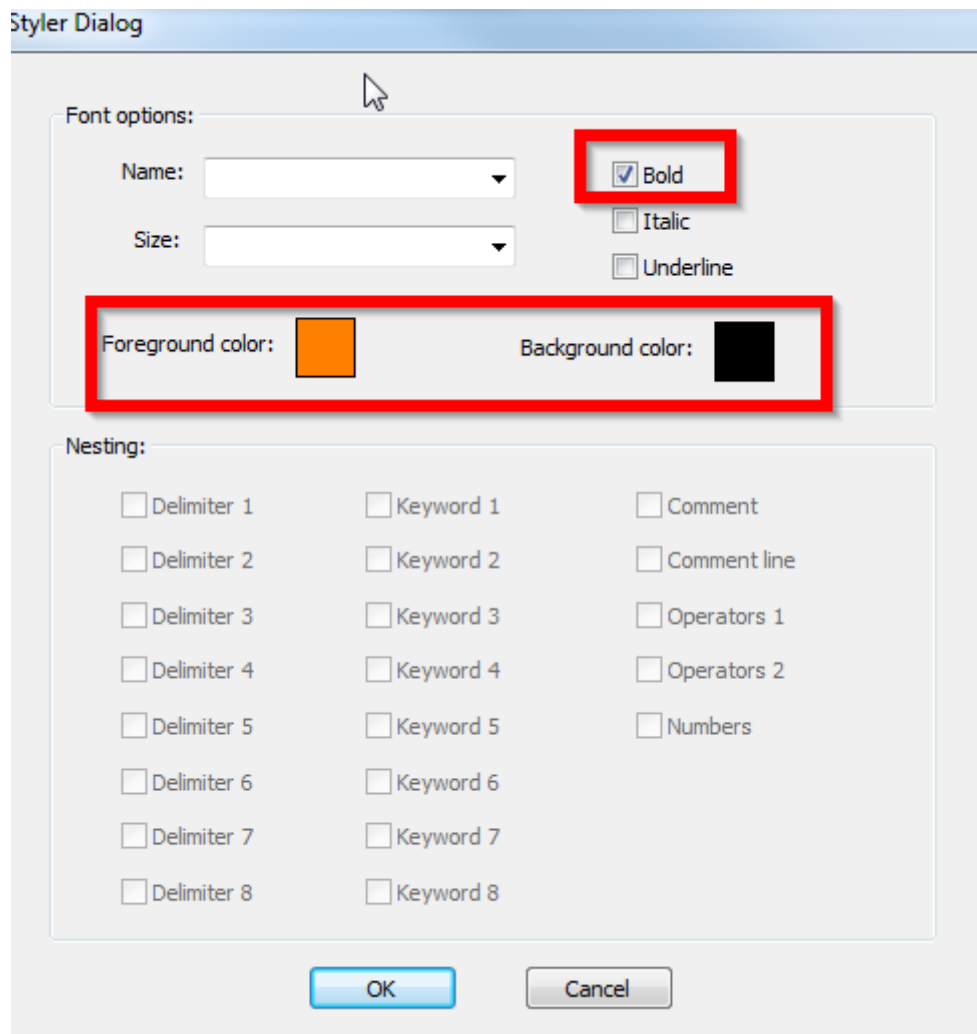


Going to the “Keywords Lists” tab, and select “styler”, for example from the 3rd group which comprises a list of all (present) uccnc functions.



And you can now change the style (font, size, bold, italic, underline, foreground colour or background colour) for that group of items as shown below, all of the other items and groups within the language style can be changed to whatever your personal preference is in exactly the same way.

Select “OK” and the settings will be changed.



Requests:

If I’ve missed something out, or you have a better preferred colour scheme, please let me know and I’ll happily consider it in the future and try to add it in as the updates come through from uccnc (until such time as they create their own Macro Editor should they ever have the free time to do it)

Post something on the CNCdrive forum and I’m sure I’ll find it and respond.