

Working with



in Notepad++

Version 1.0

Introduction

I really like Blitz Basic 2 but the editor (SuperTed) is far from ideal to work in. Therefore I created a user defined language for Notepad++ (+other stuff) to ease the process of working with Blitz Basic 2. This is what you can expect:

- Syntax highlighting
- Auto-completion of most keywords (also asm keywords)
- Foldable region support
- Function / Statement list
- Automation (F5 in Notepad to run and compile code in WinUAE)

A screenshot of the Notepad++ application window. The main editor area shows Blitz Basic 2 code with syntax highlighting. The code includes a region for constants, a PrintAt statement, and a Blitz mode declaration. A function list on the right side of the window shows the PrintAt function. The code is as follows:

```
7 ; region @Constants
8 ; CDStatus bit definitions
9 #CDSTSB_CLOSED = 0 ; Drive door is closed
10 #CDSTSB_DISK = 1 ; A disk has been detected
11 #CDSTSB_SPIN = 2 ; Disk is spinning (motor is on)
12 #CDSTSB_TOC = 3 ; Table of contents read. Disk is valid.
13 #CDSTSB_CDROM = 4 ; Track 1 contains CD-ROM data
14 #CDSTSB_PLAYING = 5 ; Audio is playing
15 #CDSTSB_PAUSED = 6 ; Pause mode (pauses on play command)
16 #CDSTSB_SEARCH = 7 ; Search mode (Fast Forward/Fast Reverse)
17 #CDSTSB_DIRECTION = 8 ; Search direction (0 = Forward, 1 = Reverse)
18 ; endRegion
19
20 ; Print at location with colour
21 Statement PrintAt{x.w, y.w, col.b, text$}
22   Locate x,y : Colour col : Print text$
23 End Statement
24
25 ; Initialize
26 BLITZ ; Go into blitz mode
27 Slice 0,44,320,200,$fff8,4,8,16,320,320 ; Create a slice
```

There are a few limitations to this system, these are:

- Functions and Statements must be declared at the start of rows to show up in function list (no whitespace before Function/Statement keywords)
- BB2 files are stored tokenized in Blitz Basic 2, so you shouldn't edit and save the project files in Ted/SuperTed at all, otherwise they will contain gibberish when opening them in Notepad++ again. If you want to use examples that are tokenized (or accidentally saved over your ascii file), open the .bb2 project file in SuperTed and go to Project / Save ASCII to save a plain text version of the code which you can then open in Notepad++.
- Compiler options are not stored automatically with your project, see the end of this file for a solution.

Getting the necessary files

First you need to download and install WinUAE, Blitz Basic 2 and Notepad++ if you don't already have them installed. Here are the links for the user defined language files and tools:

<http://www.gamephase.net/files/linked/BB2-NPP-v1.0.zip>

<http://www.gamephase.net/files/linked/npp-bb2-tools-v10.zip>

Setting up syntax highlighting, regions, keywords and function list

1. Open Notepad++ and go to Language / Define your language...
2. Click Import... and select the file "UDL-BlitzBasic2.xml".
3. Close the User defined languages window and close Notepad++.
4. Copy the file "blitzbasic2.xml" to [Notepad++ installation directory]/plugins/APIs
5. Go to %AppData%\Notepad++ and open functionList.xml. Add the following association (under the other ones):

```
<association userDefinedLangName="BlitzBasic2" id="blitz_basic_2"/>
```

and add the following parser (under the other ones):

```

<parser id="blitz_basic_2" displayName="Blitz Basic 2">
  <function mainExpr="^[\\t ]*(Function|Statement|\\.)(\\s\\t)*([a-zA-Z0-9]+\\$*)(\\s\\t)*({|:|\\s|\\$)" displayName="$functionName">
    <functionName>
      <nameExpr expr="(\\.|[\\t ]+)[a-zA-Z0-9]+\\$*" />
    </functionName>
  </function>
</parser>

```

6. All done, save Blitz Basic 2 source files with the extension .bb2 for the syntax highlighting and auto-completion to work. The function list window can be toggled from View / Function List in Notepad++.

Creating regions in your code

Regions are simply created like the example below:

```

; region @YourRegionName
; your code goes here
; endRegion

```

Setting up automation

Blitz basic 2 has an AREXX port so it's possible to automate it using AREXX. You can take the following steps to set things up.

1. In WinUae set serial port to TCP://0.0.0.0:1234 and select "Direct" below the drop down box (Settings / Host / IO ports). Save the WinUAE configuration and quit WinUAE, add the following to the configuration file manually (under the other lines concerning serial): serial_translate=crlf_cr
2. Create the file DEVS:MountList on the virtual harddrive with the following content (if it does not already exist)

```

AUX:
Handler = L:Aux-Handler
Stacksize = 1000
Priority = 5

```

3. Add the following commands to the end of S:user-startup

```
mount aux:  
newshell aux:
```

4. Create a file named blitzbasic2.rexx in S: with the following content:

```
/* blitz automation */  
address TED_REXX1  
SHOWSCREEN  
WINDOWTOFRONT  
ACTIVATE  
LOAD ARG(1)  
COMPILE
```

5. Download the command line tools I made specifically for this purpose (but can be used for other purposes) and copy them to the Windows directory.

<http://gamephase.net/files/linked/npp-bb2-tools-v10.zip>. The tools are:

ConvertEOL	Converts EOL characters in text files between different formats (LF/CR/CRLF)
WinUAEarexx	Runs an Arexx script in WinUAE over Telnet
BringToFront	Brings an application with specific window title to front

6. Create a batch file (.bat) in the same folder as your source file(s) with the content below (change paths and filenames accordingly)

```
WinUAEarexx blitzbasic2 1000 "WB31:Blitz2/Projects/Test/test.bb2"  
BringToFront "[Amiga1200Dev.uae] - WinUAE"
```

- The WinUAEarexx command should be supplied with the path to the source file as seen by the emulated Amiga. 1000 after the script name is how long to wait before closing the telnet connection, if closing instantly it seems that the command won't be transferred properly.

- BringToFront needs the exact window title of the running WinUAE instance.

Using the automation

1. Start WinUAE, load your configuration and start the emulation, then run Blitz Basic 2 (SuperTed).
2. Edit and save the Blitz Basic 2 source file(s) in Notepad++.
3. To compile and run, press F5 in Notepad++ and select the batch file you created in step 6 above. Blitz Basic 2 should reload and compile the source file and WinUAE should be brought to the front.

Edit Compiler Options

The compiler options in Blitz Basic 2 are saved per project and are stored with the project in a .extra file. When using Notepad++ to edit your code, this .extra file will not be saved automatically (since you don't save the project in the BB2 SuperTed editor). This is how you can edit and save these options manually:

1. Take a copy of your ascii version of the project file (just copy-paste it in the project folder)
2. Open the project file in blitz basic 2.
3. Change the compiler settings to what you want.
4. Go to Project / Save to save the project along with the compiler options. This will replace the ascii version of the project file with a tokenized file, therefore it should be copied before doing this step.
5. Close the project in BB2 and delete [projectname].bb2 and [projectname].bak. Rename the copy of the ascii version of the project back to [projectname].bb2. Next time you load the ascii version, the compiler options should be what you changed them to.

Conclusions

This system should make the process of making games etc. In Blitz Basic 2 easier. If you have any problems or suggestions, please post them to the thread about this system on English Amiga Board: <http://eab.abime.net/showthread.php?t=86316>