Hacking Final Fire Pro Wrestling

What you will need to edit

Before you start hacking the Final Fire Pro ROM you will need some important pieces of software and files.

- A copy of the Final Fire Pro Wrestling ROM (Keep an unedited version somewhere too)
- An emulator (I recommend VisualBoy Advance)
- A hexadecimal editor (I recommend MadEdit)

If you're working on a Windows machine I would also make sure you have East Asian languages installed.

Replacing a default wrestler

Before you start…

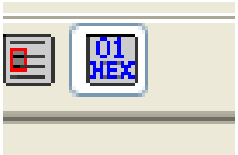
If you want your patch to include my translation, patch the ROM first and then edit it.

Movesets, Logic and stats

Before you open the ROM you should make sure you have an edit ready to drop straight in to the game. Boot up Final Fire Pro and create your edit, my example here is Bear-San:

Complete the edit fully so that it has skills, parameters, moves and logic as you want them to appear in the game. Now save.

The next step is to open MadEdit and view the files you are working with. When using MadEdit I strongly recommend switching to Hex Mode. This way you have the hex values on the left and the text values on the right.



Now to find the wrestler data run a search (CTRL + F) for the phrase “No Data”. This comes up several times but the first one should be right above the start of the wrestler data, the first one being Tatsumi Fujinami. If you’re working with addresses, Fujinami starts on 000B510C.
The data you’ve found contains everything, including the appearance of the wrestler. The only thing that is stored else where are the colour values of the wrestler, but I will explain those later.

To give you an outline of what the data is:
First values – The first two values contain information related to how the name is displayed. For Fujinami the code is 0180 which will show his name as “Tatsumi Fujinami” or that exchange is on and the middle value is the space.

Second values – Next you have the text values containing the wrestler name. These include first, second and nicknames.

Main data – The bit below contins everything else including moves, logic, stats etc.

Fourth data – After the main bulk of the text there are four strands of hex containing the costume data. In Tatsumi Fujinami this starts at address 000B52D6 and ends at Kensuke Sasaki.

Now to replace the wrestler is very straightforward. With both the ROM you want to edit and the save containing your edit open, we need to copy and paste the data.

First select your edit data. View the save data switch to text by clicking tab (Tab switches modes). If you’re copying the first edit in the file, the section you need to copy is from 00000008 to 000001CD. You should have highlighted a total of 28 rows plus six 8-bit hex values. Change to hex with tab and then copy.

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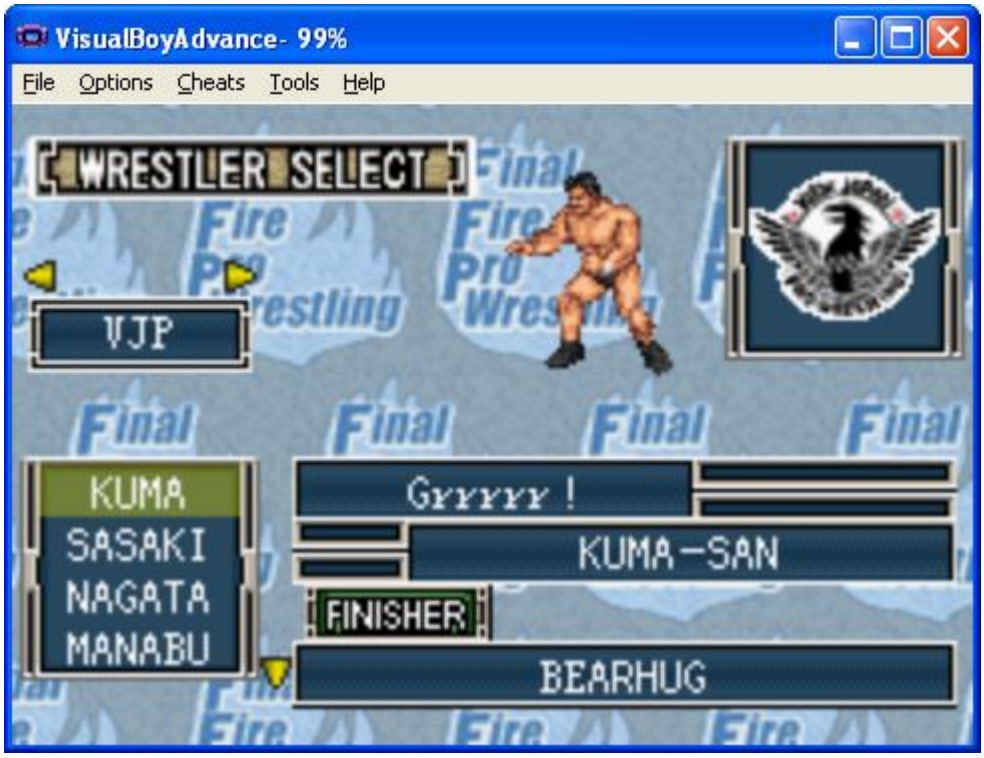
Offset    00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F | 0123456789ABCDEF
00000000: 46 49 4E 41 4C 46 50 00 01 03 82 6A 82 74 82 6C | FINALFP ▯▯▯ ▯ ▯
00000010: 82 60 00 00 00 00 00 00 00 00 00 00 81 7C 82 72 | ▯            ▯ ▯
00000020: 82 60 82 6D 00 81 63 00 00 00 00 00 00 00 00 00 | ▯ ▯   …
00000030: 82 66 82 92 82 92 82 92 82 92 82 92 81 49 00 00 | ▯ ▯ ▯ ▯ ▯ ▯ ▯
00000040: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 B9 5A |                ▯Z
00000050: 01 4F 06 18 10 00 00 00 00 00 00 00 00 00 00 00 | ▯O▯▯▯
00000060: 00 03 03 00 00 00 00 12 00 00 00 00 02 01 00 03 |  ▯▯     ▯     ▯▯ ▯
00000070: 03 03 03 03 03 03 03 03 03 03 03 03 03 03 03 03 | ▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯▯
00000080: 03 03 03 00 0D 00 1C 00 91 00 1D 06 F9 00 0D 01 | ▯▯▯      ▯   ▯ù  ▯
00000090: AF 01 A3 01 FE 01 1D 02 39 02 45 02 61 02 87 02 | ▯▯▯▯þ▯  ▯9□E▯a▯▯▯
000000A0: 9F 02 1D 06 C5 02 D8 02 DE 02 E2 12 FC 02 13 03 | ▯▯  ▯▯▯▯▯▯▯ â▯ü▯▯▯
000000B0: 28 03 2D 03 8E 03 78 03 77 23 C6 03 1D 06 FD 03 | (▯ -▯▯▯x▯w#▯▯  ▯ý▯
000000C0: 1A 04 32 04 3A 04 63 14 1D 06 73 04 7F 04 B3 14 | ▯▯2□:▯c▯  ▯s▯▯▯▯▯
000000D0: EC 04 28 05 4D 05 A7 04 D8 04 10 05 37 05 48 06 | ì▯ (▯M▯▯▯▯▯▯▯7□H▯
000000E0: 7B 05 5D 05 95 05 C5 05 CA 05 BB 05 99 05 25 06 | {▯ ]▯▯▯▯▯▯▯▯▯▯▯ %▯
000000F0: A2 05 26 06 AC 05 27 06 32 3C 48 57 64 64 00 00 | ▯▯ &▯▯▯ '▯2<HWdd
00000100: 3C 41 48 54 63 64 00 00 14 23 30 37 39 3E 3E 3E | <AHTcd  ▯#079>>>
00000110: 3E 3E 3E 3E 3E 52 00 00 0C 14 14 14 1E 2D 30 38 | >>>>>R  ▯▯▯▯  -08
00000120: 3A 3F 46 49 49 58 00 00 03 08 08 08 08 12 15 18 | :?FIIX  ▯▯▯▯▯▯▯▯
00000130: 20 25 2F 3C 3C 55 00 00 0A 0F 2D 30 53 53 00 00 |  %/<<U   ▯-0SS
00000140: 00 00 0C 0F 41 41 00 00 2D 41 5F 64 0A 4B 55 64 |   ▯▯AA  -A_d KUd
00000150: 14 32 37 00 0A 50 50 00 64 64 64 64 64 64 64 64 | ▯27  PP dddddddd
00000160: 50 46 00 00 14 14 19 20 46 00 00 00 30 35 3A 53 | PF  ▯▯▯ F   05:S
00000170: 58 00 00 00 23 2D 4D 5F 5F 00 00 00 00 00 03 0D | X   #-M__     ▯
00000180: 41 00 00 00 3E 3E 41 46 5A 00 00 00 41 41 5A 5A | A   >>AFZ   AAZZ
00000190: 64 00 00 00 64 64 64 64 64 00 00 00 64 64 64 64 | d   ddddd   dddd
000001A0: 64 00 00 00 50 64 00 00 50 64 00 00 50 64 00 00 | d   Pd  Pd  Pd
000001B0: 55 64 00 00 46 64 00 00 46 37 50 50 00 00 00 00 | Ud  Fd  F7PP
000001C0: 00 00 00 00 48 2D 3F 52 00 01 00 00 00 00 00 00 |     H-?R ▯
```

Now replace the data stored in the ROM. In the case of Tatsumi Fujinami, this data starts from 000B510C and ends at 000B52D1. Again, this should be 28 rows plus 6 8-bit hex values. Click paste and save. Boot your ROM up in VBA and you should have something like this:



Follow the instructions to replace anyone in the game. Remember that the wrestler data is 26 rows and 6 8-bit values long.

Appearance

This bit isn't difficult but it can be a bit tedious. Using the edit you created earlier, view the save at address 00000240. This is the appearance data for your first edit. On other edits, it will be the bit that appears after the main wedge of data (This finisher name is usually the last part of this) and the name of your next edit. This is ten 8-bit hex values long, remember that if you are creating someone using Fujinami's head, the first value will be 00. Copy this string in the hex view.

Go back to the ROM you are working on. The data you want to replace is immediately after the data you just pasted in to replace the move set, logic etc.

Remember that the head hex value contain 2 8-bit hex values. They represent head numbers from 0 to 328. The first value may be 00 e.g. Kensuke Sasaki 0001. So don't forget!

All subsequent wrestlers have their costumes stored at the end of their data with similar spacing. Now just paste the data from your save appearance to the wrestler appearance in the ROM.

Save and load in VBA to get something like this:

Of course you will need to replace all 4 costumes.

Colour

The final stage is replacing the colours. The address for each costume are included in the spreadsheet attached and start at address 000D316B. Jason Blackhart put the list together originally. Now go to the address of the wrestler and costume you're working on.

The colours are arranged in to the same order they are in on the colour screen in edit mode. Each colour has two 8-bit values between 0000 and FFFF but we don't have that many colours. Instead you only have the default colours that are available by pushing A and B to colour range number, you you're stuck with the default pallets that SPIKE used so you may need to compromise.

Go back to the colour edit screen and load up the default colours you want to use:

Now convert these colour into a hexadecimal string (If you're not sure, enter the number in the windows calculator and then click "Hexadecimal"). Now type the hex values in replacing the default values. Save and check that your wrestler appears correctly: