
Subject: Out-of-this/Another World on Apple II+
Posted by [Vince Weaver](#) on Fri, 18 Jan 2019 23:41:32 GMT
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Hello

so I was inspired by a Pico-8 version I saw, and I mocked up the first two levels of Another World (Out of this World in the US).
<http://www.deater.net/weave/vmwprod/ootw/>

I know there was an official IIgs version, but I wanted to see if I could get something that would play on a II+.

It was actually nice doing some plain 6502 assembly w/o cycle counting or size-optimizing for once.

Vince

Subject: Out-of-this/Another World on Apple II+
Posted by [Anonymous](#) on Sat, 19 Jan 2019 00:03:25 GMT
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Originally posted by: Chris Tobar

I loved that game when I was a kid! I had it for Sega Genesis. I used to play it every day. I never got very far though! I got stuck in the prison level. I was able to escape out of the cage with the big alien guy, but then I couldn't figure out where I was supposed to go and kept running around trying to stay away from the guards. I was really blown away by the graphics and the intro video, where the main character was entering his lab and started up the particle accelerator.

I definitely want to check out your Apple II version! I'm using a real Apple II, and I don't have any way of transferring disk images yet (I'm working on it).

- Chris

Subject: Re: Out-of-this/Another World on Apple II+
Posted by [Vince Weaver](#) on Sat, 19 Jan 2019 01:39:29 GMT
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On 2019-01-19, Chris Tobar <gatewaycityca@yahoo.com> wrote:
> I definitely want to check out your Apple II version! I'm using a real
> Apple II, and I don't have any way of transferring disk images yet
> (I'm working on it).

just to clarify, my little demo here is only the first two rooms of the

game, not a full version of the game. It is playable though. It's only 6k, so there's space to implement more, but I've sort of run out of time to work on this now that the semester is about to start up again.

Vince

Subject: Out-of-this/Another World on Apple II+
Posted by [Michael AppleWin Debu](#) on Mon, 28 Jan 2019 04:57:11 GMT
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Nice work!

Keep us posted if you do more rooms/levels.

Subject: Re: Out-of-this/Another World on Apple II+
Posted by [Vince Weaver](#) on Sat, 02 Mar 2019 22:19:09 GMT
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On 2019-01-18, vince@pianoman.cluster.toy <vince@pianoman.cluster.toy> wrote:
> so I was inspired by a Pico-8 version I saw, and I mocked up the
> first two levels of Another World (Out of this World in the US).
> <http://www.deater.net/weave/vmwprod/oow/>

I went and made the full intro movie from the game, in Lores graphics.
See it here:
<https://www.youtube.com/watch?v=tXrc6xhUPAs>

At first it was a struggle to fit in the 48k of a II+, but eventually figured out if I broke up the data into overlays using LZ4 I could load data per-scene, and the whole thing is only 28k on disk.

The capture is from real hardware, but a IIe as the II+ was having Disk II issues.

Vince

Subject: Re: Out-of-this/Another World on Apple II+
Posted by [Anonymous](#) on Mon, 04 Mar 2019 13:22:35 GMT
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Originally posted by: Tom Porter

HOLY CRAP... how did you do this!!!

Subject: Re: Out-of-this/Another World on Apple II+
Posted by [Vince Weaver](#) on Tue, 05 Mar 2019 18:57:11 GMT
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On 2019-03-04, Tom Porter <laseractiveguy@gmail.com> wrote:
> HOLY CRAP... how did you do this!!!

haha I did it all by hand so it took forever.

I went frame-by-frame from the intro movie from I think the EGA Windows version. That only has 16 colors which actually matched relatively well to lores.

I actually left out about half the frames, so it's not as smooth as the original.

Most of the scenes are a background, with only some motion in front. So I converted the background to 40x48 lores, and then the following frames made the background transparent (I used grey (0xa) as a transparent color).

The elevator scene was done manually (just drawing lots of lines). The DNA scene was more complex, and the scenes with text were also done a bit differently.

Fitting it all in 42k or so (so I can run it on a II+ w/o language card) was the hardest part. I ended up using data overlays, swapping out the data every few scenes, and each overlay is compressed with LZ4. The LZ4 and disk code (I get rid of DOS to make room) are by qkumba.

Vince

Subject: Re: Out-of-this/Another World on Apple II+
Posted by [Vince Weaver](#) on Fri, 23 Aug 2019 17:51:35 GMT
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So I wasted some time the last few weeks and got the "Another World" game up to the end of Level 4 on the Apple II+. Also got the end credits playing with Mockingboard music.

The game is perfectly playable, though the keys are different (due to the Apple II keyboard quirks) and the NPC AI is horrible compared to the real game.

The disk is more or less full (had to hexedit to free up a few sectors). Though could probably free up space if I started compressing things.

You can get the disk images and more info here:

<http://www.deater.net/weave/vmwprod/ootw/>

You can watch a video playthrough with some commentary here:

https://www.youtube.com/watch?v=ccQqD_4CXgl

Vince

Subject: Re: Out-of-this/Another World on Apple II+
Posted by [qkumba](#) on Fri, 23 Aug 2019 19:45:49 GMT

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Amazing work.

If you decide to go down the compression path, then I'd like to point you to LZSA:

<https://github.com/emmanuel-marty/lzsa>

It's faster than aPLib, and the ratio is still decent.

Subject: Re: Out-of-this/Another World on Apple II+
Posted by [Vince Weaver](#) on Fri, 23 Aug 2019 20:29:04 GMT

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On 2019-08-23, qkumba <peter.ferrie@gmail.com> wrote:

- > If you decide to go down the compression path, then I'd like to point you to LZSA:
- > <https://github.com/emmanuel-marty/lzsa>
- > It's faster than aPLib, and the ratio is still decent.

I'll have to look into that.

When targeting a 48k system though, compression is hard because there's not enough room left to compress out of unless you can break things up in small chunks (like I do with the intro movie). It all ends up being overlay programming which I guess is a lost art these days.

Also, for things like the background images in the game I use RLE compression because for the graphics files it actually compresses better than LZ4.

Overall for "Another World" I was focusing on getting things working rather than any sort of efficiency so there's a lot of room for improvement. The laser collision detection code is particularly bad, I'm sure there's a better way to do it.

The software sprite code is also not that great (and I cheat a bit and sprites can only appear on even lines).

It is nice having a somewhat generic sci-fi game engine that I could

potentially repurpose at some point.

Vince

Subject: Re: Out-of-this/Another World on Apple II+
Posted by [qkumba](#) on Sat, 24 Aug 2019 02:24:45 GMT

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- > When targeting a 48k system though, compression is hard because there's not
- > enough room left to compress out of unless you can break things up in small
- > chunks (like I do with the intro movie). It all ends up being overlay
- > programming which I guess is a lost art these days.

If it's a one-time decompression, then the compressed data can appear at decompression buffer-3 bytes or so, and decompress backwards over the top of the compressed data. I do that with aPLib all the time.

- > Also, for things like the background images in the game I use RLE compression
- > because for the graphics files it actually compresses better than LZ4.

LZSA can switch arbitrarily between LZ and RLE, unlike LZ4 which alternates between copy and store, so you might get some additional gains.

- > Overall for "Another World" I was focusing on getting things working rather
- > than any sort of efficiency so there's a lot of room for improvement.

Yes, I understand. If not for this project, then I'm sure that there will be others. :-)

- > The laser collision detection code is particularly bad, I'm sure there's
- > a better way to do it.
- >
- > The software sprite code is also not that great (and I cheat a bit and
- > sprites can only appear on even lines).
- >
- > It is nice having a somewhat generic sci-fi game engine that I could
- > potentially repurpose at some point.

That sounds like a dream.

Subject: Re: Out-of-this/Another World on Apple II+
Posted by [Anonymous](#) on Sat, 24 Aug 2019 14:56:52 GMT

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Originally posted by: fadden

On Friday, August 23, 2019 at 12:45:50 PM UTC-7, qkumba wrote:

- > If you decide to go down the compression path, then I'd like to point you to LZSA:
- > <https://github.com/emmanuel-marty/lzsa>
- > It's faster than aPLib, and the ratio is still decent.

Shiny!

Quick test on the hi-res images from my fhpack corpus (number is total size in bytes of the output):

lz4 -9f: 248473

lzss: 243991

fhpack: 242771

lzsa -f1: 231340

lzsa -f2: 210739

(That's on 81 images at 8K each.)

Subject: Re: Out-of-this/Another World on Apple II+
Posted by [slickrcbdnews](#) on Tue, 03 Sep 2019 05:17:13 GMT

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Is this a sign that I'm getting old?

Back when I was a kid using my real Apple IIGS (It's been boxed up at my mom's house since 2008), I would have thought this was far inferior to the IIGS version and dismissed playing it.

Now, at age 40 I can appreciate the work and skill in porting a game to an older system with inferior hardware and making it playable when the original programmers had far superior processing power and memory to work with.

I recall thinking that the Bard's Tale III was terrible compared to Bard's Tale I and II because I owned the IIGS version of Bard's Tale I and II, and they only released the IIe version of BT3. I got to try it at a friend's house, but did not beat it until I pirated it from the Asimov site something like 5 years later when I was in high school. I kept waiting for the IIGS version to come out (and I'm still waiting almost 30 years later. I can't recall if I got them in '90 or '91, those years blur together since I had the same teachers for 5th & 6th grade) before I'd go out and buy it.

About the only games I can think of with IIGS and IIe versions that did not make the IIe versions seem like crap in comparison was Sierra's AGI adventure games where only the sound really suffered, though I heard that the IIe version of Arkanoid wasn't bad, I never tried it.

Subject: Re: Out-of-this/Another World on Apple II+
Posted by [Anonymous](#) on Tue, 03 Sep 2019 13:39:39 GMT

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Originally posted by: fadden

On Monday, September 2, 2019 at 10:17:15 PM UTC-7, slickr...@gmail.com wrote:

> Is this a sign that I'm getting old?

Well, if it's the *only* sign that you're getting old, you're doing better than the rest of us. :-)

> I recall thinking that the Bard's Tale III was terrible compared to Bard's Tale I and II because I owned the IIGS version of Bard's Tale I and II, and they only released the IIE version of BT3.

Maybe you can back-port this to the IIGs:

https://store.steampowered.com/app/843260/The_Bards_Tale_Triology/
