

Commodore Free

Issue 20 May 2008

www.commodorefree.com

Free to download magazine
Dedicated to Commodore Computers

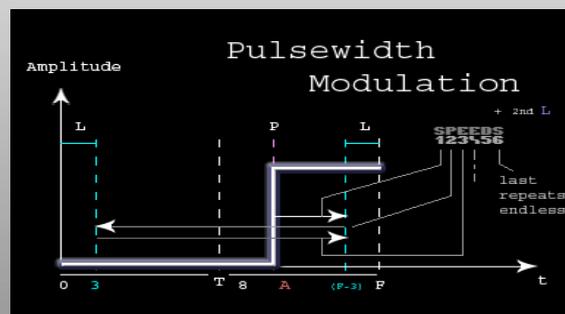
Available as Text, Html, PDF, SEQ and Commodore 64 D64 disk image

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CONTACT

info@danywild.com
info@world-wild-music.de



Welcome to My **Commodore**
C16 / Plus 4
Collection



Editor

I am not really the best person, you should try asking someone else as my knowledge is more limited and I wouldn't call myself and expert on the subject.

I contact a great number of people about writing articles and usually receive the standard response as above, to be honest I can appreciate a lot of time needs to go into writing articles and lets be honest I am not the best person to edit and layout pages in a magazine, If I were to list 10 people I wouldn't put myself near or even in the top 100 but if I didn't do it who would?

Many people find the magazine interesting and that's good to hear some think its lame and poor that is also good to here, I suggest you create or contribute to help the magazine obtain a higher status, If you know something feel free to write an article sure someone else will write in and say you are wrong but you and the entire reader base will have learnt something new and that's is what the game of life is all about, sharing and learning or am I reading the wrong books

I tried asking people to design a logo but no one would help so in the end I had to design the thing myself I learnt that I cant draw, but actually I think the end result is rather good, I would have liked a more 8-bit look complete with jagged edges and a better colour palette but I don't know how to do that so we are left with what we have,

We also Had a Commodore scene meeting I think the last one was over 2 years ago! Discussions were about having a uk commodore club more news on that next month as developments are happening in that area but its still early days

Regards
Nigel
www.commodorefre.com

Contents

Editorial and Contents	
Contents	Page 2
Readers Comments	Page 3
News	
Information and news items	Page 4
Commodore Scene get together	Page 27
Tutorials	
In the Beginning Part 5	Page 7
TND Creating music with DMC	Page 16
Extracting Text from Commodore applications using the Winvice Emulator	Page 11
Reviews	
C64TCP Review	Page 18
WE ARE FAMILY – plus 4 dvd	Page 22
Interviews	
Free interview with Paul www.commodore-plus4.co.uk	Page 14
Dany Wild DJ And remixer	Page 20
Nightlord Commodore 64 programmer	Page 23

Readers Comments

EMAIL : = David Sudarsky
SUBJECT Commdoore Free

Thanks so much for Commodore Free! I'm not sure why it took me so long to locate your site, but I'll be reading all the back issues eventually. So, you had some legal trouble with the first 3 issues? That brings up the curious question of how you are able to use the trademarked 'Commodore' name in the title of your magazine? Would be interested to know.

Back in the 80s, when I was a teen, I used to program some for Uptime, a monthly Commodore disk magazine. They used to pay me a few hundred \$\$ for each program they used. It was lots of fun, and I miss those times. Thanks to people like you that are keeping Commodore alive!

Best,
David Sudarsky
Longmont, Colorado, USA

--

Are you Vegetarian? Pay us a visit at
<http://www.TheVegetarianSite.com>

COMMODORE FREE

Well I am using the Commodore name but am hoping this doesn't breach copyright or trade names as I always advertise as Commodore free, Commodore can mean other things like a rank in the navy so cant really be copyrighted, all I relay want to do is create a magazine, also no one has hassled me about using commodore and I have written to many "commodore" companies so far I am ok

Toni Westbrook

Dear nigel Parker,

First off, thanks for supporting the Shredz64 project and PSX64! It's simply awesome there are so many supporters out there of the Commodore and other vintage machines. The initial PSX64 PCB board has arrived - it has been tested and works great. While there are a few fixes to make, none are major, and a batch order of boards will soon be ordered. This means the PSX64 will be ready to ship soon! For more information, please check out the latest Shredz64 blog entry:

<http://www.toniwestbrook.com/archives/76>

Thanks again!
Toni Westbrook

Synthetic Dreams
www.synthdreams.com
www.toniwestbrook.com

COMMODORE FREE

Tony the thanks is really to you without people developing new hardware and software the Commodore scene would I suspect dry out, how many people just want to use the same old hardware and software forever!

Email: commodorefree
From: "Chris Syntichakis:

Hello,
I just read the 19th issue of the CF and I like it. I like VERY much that you asked Robert Bernado about the c-one. I am one of the "victims" that got one of them. In fact it should be called A-one (A= Amstrad) as the Amstrad cpc coreis almost perfect (plays games/ has sound emulator, even you can load SYMBOS)

The issues of c-one were so much , they drove crazy!!!! For example un-compatibility with a some monitors. .I am glad that now they discover a "patch" (wire on board) that solves the compatibility with cartridge ports. For me, my relationship with the c-one is a kind of "love-hate".

One another thing I would like to comment is your question to Robert : "Do you think someone, like Jens Schoenfeld, should offer to bail out CMD" I am surprised you mention Jens, as Jens had a lot of finance problems with the c-one (he even sold his car), the "resurrection" process of the c-one is slowwwwww. Jens wrote me "the project (of c-1) is not dead", (I want to believe this...)

Anyway, As I see you are in UK, how's the c= community there? I m resident in UK (Birmingham) since Sep'07 and so far I found no-one c= user there.

Regards
Chris (xc8/Bronx)

COMMODORE FREE

Chris Hello I am still waiting on the c-one I was advised there may be a version 2 and to wait for that, cant remember who said that though, so I am watching the developments.

At the time I originally had the interview with Robert I didn't know that Jens was in trouble, in fact your mentioning it to me in the email was the first I knew about it, I am sure there is someone with enough funds to take over the CMD product line, although with new products coming out it may not be worth the efforts as the devices would need to be redesigned

As for C-one users I don't know of any other UK user, its good that you are uk based maybe we should have a meet-up sometime to talk about commodore

News

The Loadstar Collection

Don't Miss It! The Loadstar Collection offers every issue of LOADSTAR in a Windows Ready format, complete with Windows menu and the LOADSTAR Library database. Buy 'em by the year (or dozen) from

<<http://shop.vcsweb.com/>>

Just go to the LOADSTAR area, and take a look at LOADSTAR Years Collection. We're Going to CommVEx! Sheri and I have booked a condo in Las Vegas for July 26-27 for the amazing CommVEx convention. Looking to see you there!

New Book in the Works. Somewhere in the hinterlands of Ohio, Alan Reed is busy editing a full-blown Programmers Reference manual for DotBASIC Plus. We have 91 commands to add to BASIC 2.0 - the latest being a Text Reader with Printer output. The entire package, with Manual, 1581 disks, and CD-ROM will be unveiled at CommVEx.

Tornado Special. While going through all our stuff (and I mean all!) I found a nifty 1581 disk called "The Tower for Thinkers." Here are the games and puzzles that really stir that gray matter and drive you to muttering. A bunch of fun for your C-64 - for just \$10 (including shipping). Send your check to

LOADSTAR
PO Box 44
Holly, CO 81047

DotBASIC Plus -- the ultimate hobbyist programming language!
Only from LOADSTAR!

LOADSTAR Issue 249 is out

LOADSTAR # 249

Contents

LOADSTAR FILES

Diskcovery.

Is it a fetish? No, it is the power of a new software development environment.

The Gamer Edge by Robin Harbron Get an inside glimpse of coding in the real world.

FUN WARE

Pirates of the Dark Waters. by Richard J. Derocher Come, mateys, and find your way off a desert isle.
Four Doku. by Dave Moorman It's Sudoku for those with short attention spans. Quick. Easy Addictive!
Madman by Alan Gardner Fresh from the LOADSTAR Library, this is vertical break-out with more problems.
Connect 4 by DJB Shibley A classic board game with an evil computer opponent.

MUSIC WARE

More Corky's Classics by Henry "Corky" Cochran A gaggle of greats for your entertainment.
SoundGarden by Rorschach A collection of compelling Euro tunes.

Brain Ware

Logic Jam by Fender Tucker A group of classic logic problems to keep you from thinking about your real problems.

Puzzle Page by Barbara Schulak Another dazzling array of cross-words and other words to solve.

Utility Ware

SPREdit by Dave Moorman DB+ makes this mouse-driven Sprite Editor a cinch to use.
Walking by Dave Moorman A short demo of animated sprites using DB+.
DB+ ML Protocol by Dave Moorman Corrections in information given last issue.
Understanding Computers by Dave Moorman A look and rant about Visual Basic Express. Commodore Trick from the Web There are more wonders in the C-64 than we can imagine.
Colorwash by Richard J. Derocher A nifty special effect for your program screens.
The Grapher 64 by Brian Crosthwaite Plotting a course where no one has gone before.

LOADSTAR Extras

Star Video Poker by John Serafino A mouse-driven Vegas game with all the compulsion but none of the money.
Da Mutt and His Boy by Dave Moorman A unique graphic Pick-Ur-Path story that will have you searching for your greatest love.

D1541 project

Although its early days I am hoping the D1541 is as good as the DC2N Datasette replacement using SD cards:

My next coming hardware project is D1541 which I would also refer to as "True 1541". Surprisingly enough there's no 1541 replacement that actually satisfies my requirements, so that I am going to fill this gap by myself. It's going to be all but a quick project, even if I know I will get there. My aim is to go beyond D64 and G64 formats to support all of the copy protected disks in

Project homepage

<http://www.luigidifraia.com/c64/d1541/index.html>

Diary page

<http://www.luigidifraia.com/c64/d1541/diary.html>

Diary to date

Hi to all. Welcome to the official diary page for the D1541 project I'm actually working at. Here you find the latest development news about this project.

Older diary pages

Older entries were moved to different pages, grouped by month:
Year 2008:

18 Apr 2008

Starting again

Evening: I started to put together the ideas for the D1541. I am working at the schematics for I already captured the requirements for the 1st stage.

17 May 2008

Schematics
Morning: The 1541-II schematics I have (of which I also got an A3 printing!) are quite accurate and they match the 1541-II I have here for testing purposes. It is clear to me where to hack the hardware and how to start dumping original protected disks. There's quite some work I need to do actually and it also

involves creating some PC software for dump inspection.

NEWS

AmitopiaTV

We have a PDF mag, webcasts, Disk magazines now Video magazines

AmitopiaTV #05 10th Of May 2008 is out I just wanted you to know that #05 of the show is now out! It contains lot's of fixes. So enjoy and download :)

Amitopia 10th Of May 2008:

- Amiga News Headlines
- PowerDev 2008 report + MorphOS 2 on EFIKA
- Blender PowerDev Xtra
- Relic Amiga Demo by Nerve Axis
- Only Amiga Song

Download issue 5 and other issues from here <http://amitopiatv.blogspot.com/> There is a streamed version and an AVI download version of the magazine

Cynthcart 1.2.4 Now Available

Subject: Cynthcart 1.2.4 Now Available
From: Albert Yarusso
Date: Fri, May 16, 2008 7:46 pm
To: sales(at)atariage.com

[snip]

I am writing to let you know that Paul Slocum has released a new version of the Cynthcart software, 1.2.4. This new version of the Cynthcart sports the following improvements over the previous version (1.1):

- * Fixed pitch for PAL consoles
- * Autodetection for PAL/NTSC
- * Full-screen video mode
- * Auto-paddle-on for filter paddle
- * Added support for second paddle (pitch, LFO depth, pulse width)
- * Rearranged keyboard layout per user requests
- * Added help screen (press RETURN)
- * Added help for SID edit mode
- * Added dummy SID register to edit 3 oscillators at once
- * Fixed accidental patch changes due to C64 keyboard hardware
- * Fixed odd notes in top octave
- * Filter tweak for SID Symphony

[If you are a] previous owner of a Cynthcart, you can choose to either purchase a new Cynthcart or upgrade your existing Cynthcart. To learn how you can upgrade your Cynthcart, please follow this link:

<http://www.atariage.com/store/index.php?main_page=product_info&products_id=880>

You can learn more about the Cynthcart and purchase one here:

<http://www.atariage.com/store/index.php?main_page=product_info&products_id=322>

Shredz64

Shredz64 - PSX64 PCB checks out!

25. May 2008, 18:20 UhrShredz64Toni
First off, I want to apologize for not updating this blog for a few weeks, I've started a new job and things have been hectic getting up to speed on things. But life is starting to calm down, and more importantly, I've received the first PSX64 PCB, soldered on the chips, uploaded the firmware, and it works!

There are a few changes to make to the board, mainly due to the pinout of available parts (I have a large stock of voltage regulators that are a different pinout than how the board is configured). I'm also going to use rectangular headers with stress relief connectors for the PSX and DB9 cables so they can take more tugging (as opposed to soldering them directly to the board). However, these changes aren't major and don't require another single-board run. The next run will be a batch of 10-30 boards, which will then be available for purchase! I suspect it will be about 4 weeks or so.

<http://www.toniwestbrook.com/archives/76>

From: DigitalTalk
To: Commodorefree

Lets start for News:

The german Diskmag DIGITAL TALK is back! in 2007 we release only 2 issues, now we have 2008 and we are back to release the DigitalTalk all 2 Month for the Scene..
get al look under

<http://noname.c64.org/csdb/release/viewpic.php?id=6196>

or from our Homepage

<http://www.digitaltalk.de>

(free download).

we are looking for good DT-Logos (8Chars/4 Colours) Musics (from \$1000-\$2000)good DT-Cover painter and looking for official DT-spreader on Mailswap or per Email

Contact: digitaltalk(Champ, Co-Editor) or dejuhra(Chief-Editor) for more Info

Amiga Forever 2008

. After more than two years of work, Amiga Forever 2008 is being officially released today. This new version is the most significant upgrade ever in the Amiga Forever series. It sets new references in usability, while more than tripling the featured content and providing easy access to a universe of free downloads.

The new player for Windows is nothing short of revolutionary, while feeling as familiar and easy to use as a media player. Beyond its beautiful skin, it uses heuristic logic to autoconfigure downloaded games (including double clicks on disk images), and supports features such as saved states, disk write undo and dual monitor setups.

On the cross-platform front, the KX Light standalone boot environment features a new kernel and hard disk installation (with online updates). The Gallery section (Plus Edition CD) includes the full and original 1979 Tripos (Amiga OS precursor) presentation, and new "top secret" Amiga-Atari documents, while tons of new games and

demoscene productions are sure to deliver long hours of enjoyment. For the technically-minded, Amiga Forever 2008 also includes new ROMs, new ADFs, new HDFs, and better support for WHDLoad, AmiKit and AmigaSYS.

For additional information:

Amiga Forever Home Page

<http://www.amigaforever.com>

Screenshots

<http://www.amigaforever.com/screenshots/>

New Features

<http://www.amigaforever.com/whatsnew/>

Crash Course for Upgraders

<http://www.amigaforever.com/kb/5-121.htm>

The Amiga Forever team at Cloanto would again like to thank the numerous Amiga Friends for their long-time support (and patience, in recent months), and the many contributors who made Amiga Forever possible (as listed in the Credits section of the Amiga Forever documentation)

**Spring Expo 2008
Ft. Mitchell, KY**

Across the Ohio River from Cincinnati, OH USA

General Expo Information

C=4 is planning a super weekend for your expo activities!

The Expo will be held on Saturday, June 28th; from 9:00 am until we decide to call it quits on Sunday afternoon! We understand some of you are early birds; some of you are night owls. We will let the demo folks tell us when they want to present their demo! Over 30 hours of official Commodore activity the entire weekend! With a room the size of 2352 square feet, we are able to have demos and shops in the same room, nobody will miss a thing.

Even though the C=4 Expo is in Kentucky, it is just across the river from Cincinnati, Ohio. The C=4 expo will be held at the Drawbridge Inn located at 2477 Royal Drive in Ft. Mitchell, Kentucky. The Greater Cincinnati Airport is a short distance from the hotel. Airport shuttle service is available courtesy of the hotel.

Demonstrations and Speakers

Commitments from guests will be posted when they are confirmed:

Local tourist sites are also nearby:

<http://www.drawbridgeinn.com/directions.asp>

It is hoped that every Commodore Club can send a representative to experience the fun that expos create on a regular basis. The community welcomes like-minded hobbyists, and it is your best opportunity to meet folks you have yet to meet in person, or meet again friends you have met in the past.

Spring Commodore Expo 2008 Reservation Information

We hope you decide to spend the entire weekend with us and make it a great weekend starting on

Friday night with your Commodore friends who decide to show up early.

Hotel Information

The Drawbridge Inn is located off I-75 and I-71 in Ft Mitchell Kentucky. The cost of the single rooms in the main building is only \$74 plus taxes. Reservations will be accepted for our group at the quoted group rate, on a room available basis. To make reservations for the C=4 Expo:

Name of the Event: Cincinnati Commodore EXPO

Toll Free: (800) 354-9793

In Kentucky: (800) 352-9866

(859) 341-2800

There is an International Airport located nearby, with shuttle service provided by the hotel.

Expo Pricing

Door Charge: \$10.00/person or \$15.00/family

Selling Tables: \$15/ table or \$35/ 3 tables (The hotel charges \$10 in addition per table for power usage)

Tables are 6' in length. All sellers and demonstrators need to set up before 9:00 on Saturday morning, the doors (for these only) will open at 7:00am.

Prepayment for admission and table reservations and advance t-shirt purchases can be made at <http://c4expo.org> using Paypal.

Contact Roger Hoyer by phone, email, or in writing.

Phone: 513-248-0025

Email: thunderbird@iglou.com

C=4 Expo

c/o 31 Potowatomie Trail

Milford, OH 45150

SCACOM Aktuell issue 6 available

SCACOM Aktuell issue 6 in German is available at www.scacom.de.vu. The biggest SCACOM issue (46 pages) has also two background images and a C64-Disk.

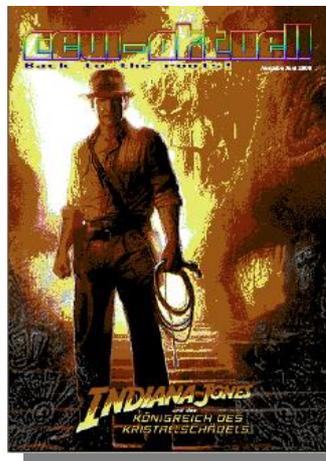
The English SCACOM issue 3 is available in July 2008.

www.scacom.de.vu

Cevi-aktuell

The German magazine Cevi-aktuell is available to download from the following link

<http://www.c64-mags.de/download.php?id=410>



In the Beginning Part 5 By Lord Ronin from Q-Link



There is the need to present ones thoughts in some form of preservation. Paintings on cave walls, weird marks in clay tablets, carved complicated hieroglyphs in tombs, different languages on papyrus, sheep skin and paper. Now we have entered the age of the Personal Computer. Where we can put our thoughts to not only a paper form. But an electronic form. And Save them to disks for the future.

I Said that this was a personal trip at the beginning. So here goes; with a part of the real personal section. Computers are an information and retrieval system. That is what I was told in 1974ce in college by the instructor. No argument on the storage part. But the retrieval part? Well let's look at that for a moment. Hmm, we have had PCs from around 1977. PET, Apple, Vic, C=64, and others. Even the IBM PC jr. There are other PC platforms that I am leaving out, like Osbourne, Mattel, Atari as they are not something I know about and their exact entry dates are lost to me. Others are left out because I don't know them. OK the Spectrum is left out because of the war between C= and Spectrum users. TRS-80 series and the other Radio Shack lines as I didn't mess with them much. All of that simply means that there were and therefore it should be understood that there are still a lot of PCs out there in the world.

30+ years of them! Here we are stuck with two problems. Cross platform, as the Apple pc's don't run the C= applications etc. The second and most horrible is backwards compatibility on many PC platforms. I mean that what you spent money and time upon now, Well it doesn't work with the new upgrade/model. Nor do you get a single thing in compensation for your time and money. Just the shaft from the company. One of the stupidest things I ever heard from a user of a non C= PC. Regarding the ability to use older software was, "Why would I want to look at that old stuff?". He wasn't being sarcastic. He just couldn't see a reason to keep or use the older stuff when the new things came out. Well the old stuff must be important. I mean it exists in the first place. You spent money on it, and spent hours of your life with it. Call me a nutter, but that makes it important for me to keep.

OK I am not just talking about games. I'm talking about things that you have written. Got a story here, one that is a real bummer. So obviously it has

nothing to do with the C= <G>. Anyway had a guy come into my shop. He had heard that Ideal with older computers. His mom had passed on. After some time they found that she had a safety deposit box. When it was opened, there were several things in it that I forget. As I remember the one thing that brought him to me. A disk, handwritten label that said it was for the family. Done to the best of my understanding on a 286 and the Word Processor she liked at the time. On his much newer system, well he couldn't see a flaming thing. Could be the lost family treasure, black sheep history of the genealogy or her favourite fruitcake recipe. He can't find out. Nor could I as I don't support that PC platform. Operating systems change; as does the media. So why the smeg try to save anything today on a computer, when tomorrow you can't see it?

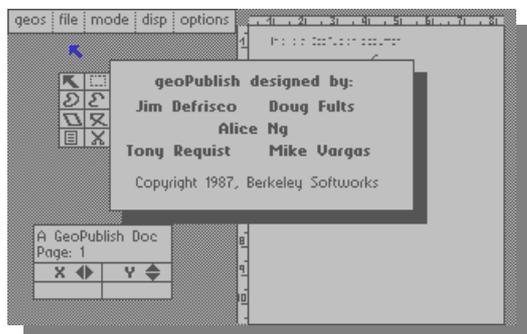
Ah, that isn't the case with the Commodore. In fact there are emulation disks from Commodore themselves, that allow the 64 to act like a Vic or a PET. Never used them I must add and I stupidly sold my factory copies. Getting my rant out of the way and using that as a basis for the writing part. Let's get to it.

We use standard PET ascii. Other PC platforms use ascii. I have already mentioned a bit on the difference. Along with the different characters from the keyboard. Sounds as if we can't look at any text from the other platforms. Not true, there are C=based tools and utilities that will allow us to translate their language to ours and the reverse. OK to be truthful it isn't 100% perfect. Some characters just don't translate. An example is needed at this point. On my BBS, I write all the text in standard PET ASCII. But that isn't to say that my callers are all using a C=machine. So how is it that they can see the text that I write, in what seems normal or native to them? I have a translator in the BBS programme. The caller selects what style he is using when he sets up his account. This can be changed at any time. This lets him read the text at the menus, messages, file information, majority of the games, and of course his e-mail. The problems are in the non text characters. | turns into a reverse backslash in ascii. Some of the keyboard characters do not come across or come across as different than originally created. Colours in ansi are pretty much the same. Save that every ansi terminal programme I have seen. Just doesn't have the colours set for the C=, and numbers, as we have. Most of the time they are just not presented in ansi.

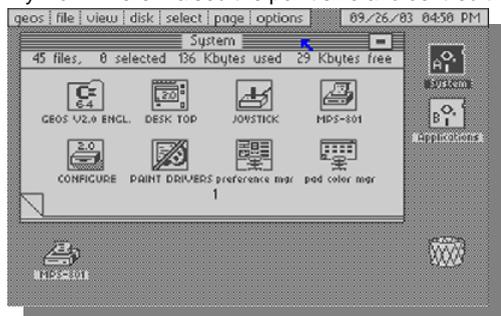
All the text files on the BBS are in standard PET. These are the files that the user can download and read. Right how does this effect the non C= user? Well they are also recreated in a style that allows them to be read online. Since he is using the ascii/ansi login. He reads the translated text on screen in a style that makes sense to him. But if he needs to have a print out of that information. He can simply buffer capture the screens. Then he can read it on his computer off line or print it out. This information isn't 100% correct though. If I use the keyboard graphics. They may not show to him on his screen. But they can print out on the page. Usually as some letter with a dot over the top. We have a Carriage Return <CR>. I understand that there is a

setting for this on other computers imprinting. If the computer is set up that way. He will see the CR characters on his page. Same for when I change colour or do reverse video in the text. These can actually print out the invisible screen, commands. Takes a bit of work in understanding the term program and the printer being used to make it more understandable. However it is still readable for the information. OK and if I limit the keyboard characters and colour stuff as well <BG>.

Yeah I am leading up to something. Writing Programmes <WP> and Desk Top Publishing <DTP>. In regards to the backwards compatibility and to cross platform compatibility. OK the simplest form for the non C= machines of today to see our work is to have them run the actual programme. To this end there is a series called VICE. A programme for the windows, Mac and the Linux platforms of today. In fact I have an older version on my some times used Linux system. I mention that for those who are afraid the work that they do in or on the C= will be lost on the unwashed masses of lemmings. Biased isn't I. In this way your work can be seen on the other machines. I'll add here that there is a thing called a .D64, also a .D71 and a.D81. These are image files that are used for the emulator. Allowing the programme to be seen and used on the non C= system. I'll talk more on that later.



Proving the point that your work can be seen on the other platforms. Now lets go to our system and the writing tools. There are many that came out. A series called Word Writer 1-6 comes to my mind. I have Used 3,4,5,6 in that series. I have a bias to the company. Sent them money, didn't get the product or the money back. This one did graphics and fonts and styles and none of it showed on the screen. Many of my work where I raised the point size and centred the



title. Well it ended with a horrible wrap around that made me redo the page. After I had printed it, since the print out was the only way to see what it looked like. TWS, or The Write Stuff from Busy Bee. This one is in the top two. Depends on who you ask what is the #1 WP and DTP for the C= system. Messed with it a it. There is a sub programme that can be loaded that will speak out on the speaker the key you have pressed. A past president of the Meeting Through The Mail group, her husband was losing his

sight and used that sub programme for his letters. Has a dictionary and in some form the ability to add graphics from the Fun Graphics Machine programme. Honestly I haven't worked with it in any form to give a good reply. Only what I have heard from users.

I'm a GEOS fan. Graphical Environmental Operating system. Came out around 1983ce. Long history that you don't need to read here. Powerful system and it does what I want from it for my needs. That is really what one wants after all. OK GEOS is a love it or hate it system. Early versions are not as great as the new stuff. But they are backwards compatible. OK this is what I like about it and what I hate. First the hate. I hate mice, and this one uses a mouse, as well as the joystick, tablets and light pens. I prefer the light pen. What other people hate is the need for at least two drives. This is on the standard non upgraded system. In fact the best for that is two drives and a Ram Expansion Unit<REU>. Can be a memory hog at times.

Well I like the fact that what I type on the screen is what I see, the WYSIWYG thing. In a text document I can use up to 7 fonts. These can be of different point sizes. Also I can adjust them to be pretty much any combination of outline, boldface, italics, underline, subscript or super script. All at the touch of a few short cut keys. I see it on the screen as I type it, great or editing and spacing. Got the single and double space thing. Margins, indentations, tabs, left, right and centre justification. Which can be adjusted paragraph by paragraph if you desire. OK I haven't found a WP on the linux system that is as easy to use as Geos and what is called GeoWrite. Now this comes with a dictionary, and the ability, like others to create your own dictionary of words. Well when you do a spell check. Yeah I know that I should do that more often. All of the other WP that I used, well they just gave a list of the unknown words on the left side of the screen. In Geos, you have the unknown word. Listed in a little box. Under that you have a part of the paragraph in which it is located. Where the word is in reverse video. Dictionary words are on the right hand side of the screen. A click on the icon and you search for a spelling close to what you have done. Don't find it try the first three letters from the set at the top. Scroll down the list and see if it is there. If its not then you can try your own personal dictionary. Anyway you find the correct spelling and you click upon it. Now you can change that one word, or all of them that are spelled in the same way. So then what if you are spelling in English and not American. Say you spell the word "tyre" and not "tire". What can you do? Just simply click on the ADD and you go to your dictionary. where you can add the word and if you like the different endings for the word. Such as the 'ing, or 'ed or many others. What I love the most about this spell checker is that you can see the word, in the context of your usage. I write stories for my local group. Where I write in accents and slurred speech. Need to see if what I write is an accent for the character, or just a smeg up on my part. Oh yeah I faintly remember that your personal dictionary can hold about 80,000 words. Or my mind is going again.

GeoPaint comes in the Geos box as well .This is a drawing programme and yeah it has colour. I'm a cruddy artist in any format or media. Making my comments invalid on the art part. Suffice to state that you have circles, boxes, filled and empty. Line drawing, free hand drawing, different brushes, more and the ability to install GeoWrite text. You can use another tool in the Geos set called a photo album.

Well that is what you create with the tool. Anyway you can take a copy of your art work and save it to the photo album. Later you can reuse the art in another GeoPaint document or use it in your GeoWrite documents. "some restrictions apply", but people made ways around that part. Earlier I spoke about backwards compatibility. I said that Geos had versions and was backwards compatible. Lets go into this for a moment. Earlier GeoWrite documents are not the same as the later version. Such as the Geos v1.2 isn't the same as Geos v2.1. In regards to the GeoWrite part. Well v2.1 of Geowrite will convert the older text to the current format for you. OK before I wanted to say it in the additives part. There is a tool called wrong is write 8.1 that will convert to older formats. That photo to album could hold more in the older versions. Meaning that in the newer one you can't use the older photo albums. Well there is a tool about, that will convert by breaking up the older photo album into several newer ones. Meaning that you don't lose your work.

OK the packages comes with the GeoWrite and GeoPaint, photo tool, dictionary, spell checking programme several fonts, a few drivers for the printer you may be using, basic input device choices and more. At the time of writing it is available for around \$25usd with manual from cmdrkey.com. At the same place is a free DL version in .D64 disks and in parts with instructions for use in a step by step manner. Set for those that are using emulators. But the .D64 version will work on a real C=. I know as that is the version I use in the shop. However it is listed as being a bit crippled in that it is not supposed to work with the additive disk programmes. More on that next paragraph.

I'm spending a lot of time on Geos. I use it a lot myself, as one reason. the other is that there is still a load of stuff out there for Geos. I'll get to that in a moment. I know of three Geos additive sets that one could pick up. GeoCalc, a spreadsheet thinggy, GeoFile, sort of a data base to my understanding. I own both of those and have never had a need for their use in my work. OK honestly I don't know what they do because I don't know a thing about using them. Last one is GeoPublish. Not going into a load of depth on this one. I use it regularly, have a great tutorial for its use, as well as the manual. No I am not explaining it in depth because there is way too much to explain. I make the shop signs with it for the "A" frame street sign, and interior signs. Make the newsletter. Laying out the columns, doing the header and footer parts. Inserting photo album images, and flowing the text around them. I've also used it to make Business cards for the shop, BBS and users group. Even made the membership cards with the GeoPublish. You can draw like in GeoPaint, oh there is a way to convert GeoPaint and GeoPublish. But that is another tool. Suffice to say that it is very



powerful. Only that it works in 40column mode. Oh did I forget to say that Geos comes in the option of the 64 version and the 128 80 column version? <innocent look>Yeah I use primarily the 80 column version. Right there was in my collection a boxed set that was specifically designed for Geos to make newsletters. I barely started it, and found GeoPublish. Although it was for an older version of Geos and replaced by GeoPublish. Had a lot of nice things. Sadly it was lost, strayed or stolen from my collection.

OK last paragraph on Geos. By the use of the Geos programmers book, and other things I am unaware of, people made a mess of things for Geos. Input drivers for other types of input items. Such as other light pens, and a different Koala tablet. I had over 60 printer drivers on my BBS for Geos. They made games and made <we interrupt this drivelist for time and space considerations>. OK I get the picture, there is way too much to list. I will say one thing for a tool that you can find for Geos. There are a few versions of a font creator. Right you can make your own specific fonts. I at one time had close to 300 of them on the BBS. Now then, there are new things for Geos. Wheels drastically improves Geos and makes it easier to use. That runs about \$25 usd at the time of writing at cmdrkey.com. Want to turn your Geos system into a fax machine? That is a can do. Want to enter the Internet and www with your C=? Well if you don't have a shell account to access needing that PPP alphabet soup stuff. Then you need "The Wave". Oh forgot to say that this is the way I go online, most of the time. And yeah I use the system to also print in postscript. So ending at this point on the topic of Geos. I confess to thinking it to be the best WP and DTP for the C=. Now to recollect all the stuff that I once had on the Hard Drive.

Some other things that you can do with the C=. Handy Scanner, came out in the early 90s I seem to recall. This is a device that lets you scan an image into the C=. A simple Black& White digital hand scanner is used. An art form not a science. As my experience has proven. These image scan can be converted to other formats. I generally convert to GeoPaint. Scanner company came out with a few additives. I only have one of them and not used it yet. Supposed to help in capturing full pages in multiple scan and aligning them up. But the documents that I have are not full and all in German. Eventually I will figure it out, I am a little optimistic I know.

I know of and have a basic form, of video digitalizer. No not even going to try to spell that one right. One is called Computer Eyes. The other is VideoByte II. Both are designed to take a image capture from a video source. Computer Eyes lists them as follows, VCR tape <VHS or Betamax >, video camera, laser disk. That last one should give you an idea of when we could do video capture work. But for the record the manual is copyrighted 1984ce. How's that for a shock? This one has additive disks to save the captured image as a News Room, Print Shop, PrintMaster and other formats. My copies of the disks were damaged before I got them. However I have a tool that lets me capture the image directly in Geos as a GeoPaint image. Computer Eyes as controls for setting the image capture. While VideoByte II does, they are inset and not really recommended for user adjustment. Now this one has some advantages over Computer Eyes. Mainly the ability to add some colour right off the bat and editing on screen. The other has the nice fact that the image you capture is saved as a 40 block Koala image. Which with certain tools can

be converted to other art programme forms. Where you can use the different features for your editing.

Another thing that we have been doing for over 20 years is digital voice and voice recognition. S.A.M. is a programme that makes the C=talk. I have it and a poor copy of the documentation. Apparently you can alter the voice to say words. Of course you have to write the lines in a more phonetic style. I found that English spellings over American are a help. With this one you can add speech to your programmes. But if programming isn't your desire. This one will read a text file. A version of this that I found on a disk is called "MuskogeeSpeaks". No programming lines are needed. Bigger reads any SEQ text file. Then the application would say the words out loud.

Magic mouth and a couple others came to me that I passed along to others. One of these I had working a bit. A cart with a little mike on it. You could store your words. Alter them, or type in words. I had it sounding like a Cylon from Battlestar Galactica. Almost had it sounding like an oriental girl. That one also was keyed to work with those Infocom text games. Where after a little adjustment. All you had to do was say the word and it would do the action. Others existed but I haven't seen them.

Best on the market in my opinion is the Covox Voice Master. I have seen three versions of this one. Most people scored the cheaper one called the Voice Master jr. Mine is the full blown one. Here I can record my own voice. Must do a little programming to make it play back. As well as alter the time and the pitch. Thankfully the documents are a real help. There is a way to have it recognise your specific voice. Haven't played with that or with the music part. Here you humm a tune and it will record it. Then you can play with the tune perfecting it for playback as a song.

Because the C=64 uses the same video theme signal of a TV. Did you know that you can video tape your game play etc? Can't say if you can do it on a DVD. Don't have a DVD burner. Anyway there are many, and I only have a couple of them, programmes to actually make personalised screens for your video tapes. One of them will even do animation. Basically you create it and save the thing to disk. Then put the tape in, set to record and then just run that file and record it to the tape. Did that for me mum a few times. Since you can record on the tape. Well someone came up with a programme called "Moviemaker". Got a copy messed with it a bit only. In short you work out through the tools in the programme to your movie. Save the separate files to the disk(s). Then record them file by file onto the tape as you would do above. Never really sat down and

created the images for it, well there is just so much time and way too many things for the C= to learn in my lifetime. <BG>

A thing came out and became very popular for a time. This thing was then modified for other activities. These are called either screen or note writers. Later they were modified to be more of an entry intro screen to programmes people made. We will stick with the first part. Some of these programmes are simple and others are mega complex. The short end is that you write a letter to someone. Or a series of them These are saved to disk. The guy you send them to, just pops the disk in his drive. Loads them up and reads what you have written. A disk letter thing. OK now add music selections, font selections, different screen dissolves as it moves from "page" to "page". Couple that with colours, flashings, animations, gfx symbols and more. Well you can see how this moved along. I sent letters this way to my mother. Now I have a guy that isn't wired to the internet, who exchanges them with me.

Did you know that there is a free programme that will let you look at either Black & White or colour jpeg son a Commodore? Right a picture format that was invented almost 2 decades after the computer. Couple of guys made it and passed it out to the C= world. We also have gif viewers. GoDot out of Germany is now a free Down Load and at this time still actively supported by the author. Does a mess of things that I don't understand. Perhaps you recognise the term "image processor"? Well I have seen what it will do in that part but Not how to do it. All I have done is, well convert art files from one C= art format to another. Along with converting them to different Amiga, Mac and DOS formats. OK and converting the other platform formats to something I can see. Not real great with it I admit.

So short on space that the programming part must be in the next part. Jamming this fast at you. We have carts that will let you do screen captures of what is on the screen at the moment you press the button. Letting you save it as different art forms. Where you can play with them later. I cheat and use this to see ways of colouring and 3D stuff. We have a cart that will play the music in stereo for you. A tool that will write the music in 6 voice stereo. We have a lot of applications that will produce many things on the commodore. I've spent all this time and disk space going over less than a fingernail of what there is for the C=. You can see now there is more than most people ever thought. You can get these programmes or many of them old and new ones off the web. They will be in a .D64format mostly. How to bring them to the C= from another platform is not the scope of this series. However it is possible with different tools.

Extracting Text from Commodore applications using the Winvice Emulator

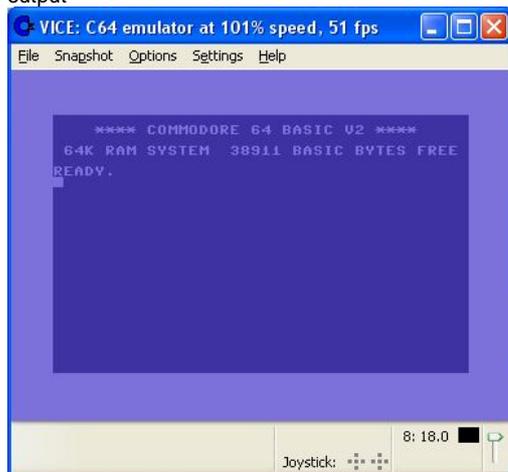
One of the many things I found frustrating was downloading a Commodore application from the internet and finding the text or documentation was embedded into the application various people tried to help me extract the text using fairly low level techniques. (read this as rocket science)

I thought there must be an easy method and there was : Vice is the Versatile Commodore emulator, emulating a number of Commodore machines, the software runs under various operating systems for example Microsoft Windows and Linux

You can download a version from the website free here is the link <http://www.viceteam.org/> Although I do promote using a real machine sometimes using real machines with emulator help makes things a little easy, assuming you have a format to run the emulator on.

I have only tested the following feature with Windows version but I have to assume that all versions should function in the same way. As I don't possess a Linux system I am unable to test this part, maybe a reader could help out and verify the function is the same for linux, mac or Amiga versions of the application.

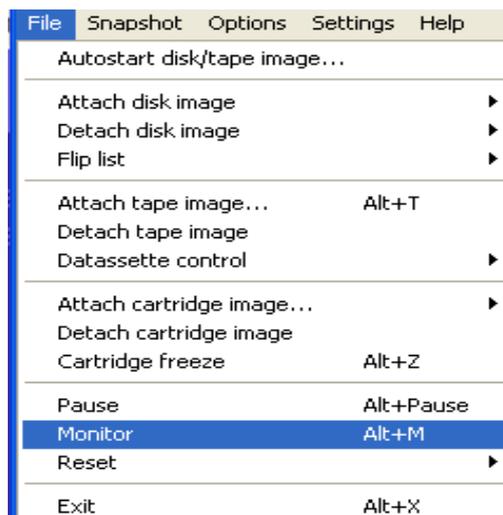
So to test I ran Vice here is the Commodore 64 output



Ok so we have seen this before, but within vice is a Machine code monitor to invoke the monitor select Alt+M or select file then from the submenu select Monitor

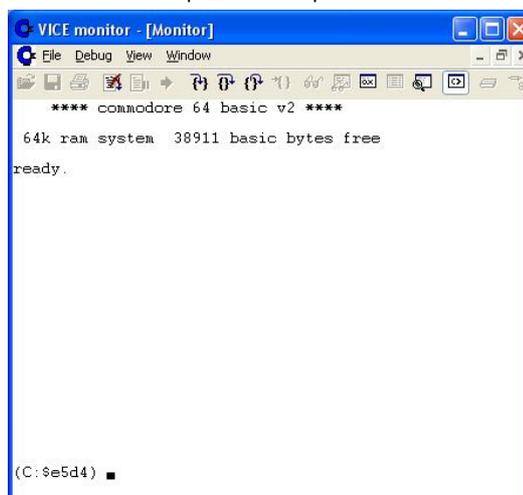
You are now in the machine code monitor, you don't need to know anything about machine code to extract the text or hexadecimal notation

from an application all you need to remember is to have the application running start the machine code



monitor then issue the command SC and hit the return key its as painless as that

The text can be copied to the clipboard and then



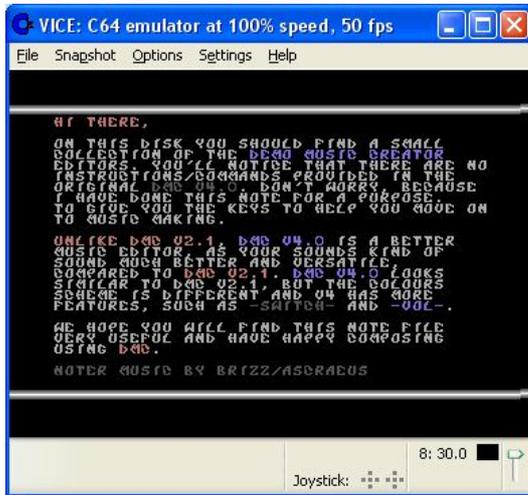
pasted into notepad or directly into a running application

Below is an example of the standard Commodore 64 after initialisation and I ran the Machine code monitor then SC and copied the text into this document

**** commodore 64 basic v2 ****

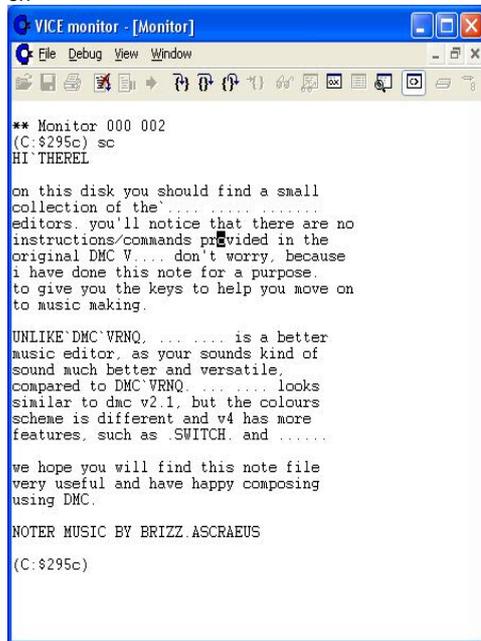
64k ram system 38911 basic bytes free

ready.



Here is a noter application running with some text about DMC music editor, there is no function to have a hard copy of the text and that would be useful while using the application so: start the machine code monitor

In the screen type SC and press return you may need to expand the monitor screen to fit all the text on



Here is the text Copied from the Monitor and inserted into this magazine

on this disk you should find a small collection of the editors. you'll notice that there are no instructions/commands provided in the original DMC V.... don't worry, because i have done this note for a purpose. to give you the keys to help you move on to music making.

UNLIKE DMC V2.1, DMC V4.0 IS A BETTER MUSIC EDITOR, as your sounds kind of sound much better and versatile, compared to DMC V2.1. looks similar to dmc v2.1, but the colours scheme is different and v4 has more features, such as .SWITCH. and

features, such as .SWITCH. and

we hope you will find this note file very useful and have happy composing using DMC.

NOTER MUSIC BY BRIZZ.ASCRAEUS

Of course this assumes the programmer has used standard text and just edited the fonts rather than obscure characters or sprites for text,

but its worth a try and far easier to read a printed document rather than on screen especially when no print option in the application is given to the user.

Also if the text on screen is flashing it makes for very difficult reading, when trying to learn how to use an application

KNOW BETTER

ok so its not always successful in the text extraction

If you have a better way of extracting text from an application then why not share it with other readers,

Of course machine code programmers may be falling about laughing at using this method or people struggling to read text in an application, yes I am aware of other methods but they involve hunting memory for specific text or locations and isn't something a new or limited knowledge user would want to attempt

The method would need to be easy to perform from a beginners point of view and the extraction would need to be saved somehow there may be a method to easily do this on a Commodore machine without external help but as we aren't all Assembler coders. It needs to be easy.

Most of these applications contained text files that had been crunched, so even with low levels of knowledge you would need to uncrunch the file in memory somehow and then display or print the information out for the use

Commodore Free interview with Paul

<http://www.commodore-plus4.co.uk/index.htm>



COMMODORE FREE.

Please introduce yourself to our readers

I am 43 old who still lives in the past - love the 80's. I am married to a lovely lady and have a daughter who's nearly 18, she is still single by the way. I am a football fanatic who follows a team since May 1981 who you may not of heard of - Dagenham & Redbridge, we are currently 4th of bottom of Div 2 of the English league. Myself and my daughter go to every home game and travel away(when we can afford it) following the Dagers.



Q. What is your fascination with Commodore machines

My 1st computer was a C16 and I was hooked on computing from that day. I had to borrow the money to pay for it. I started typing in the little programs and then bought a games book trying to enhance my basic skills. I wrote 2 games in 1985 and 86. At the time I just could'nt get enough of this little machine. I was always looking for games which appealed to me in shops and markets etc. Due to a lack of money I was forced to sell it to my father in late 1986 and was not re-united with Commodore until I got my 1st Amiga in 1988. I had an Amstrad 6128 and a MSX in

between.

Q. Can you tell our reader what Machines you own?

Commodore and None Commodore At the moment I have 5 fully working Plus 4' and 2 fully working C16's. 3 Plus 4's and the 2 C16's are complete in boxes. I also have a non working C16 and non working plus 4's which will be up and running later this year as these just need a CPU and other minor little details to sort them out.

Q. You are writing a new C16 game can you tell our readers about the game

I used to play Football Director II in the 80's on my Amstrad and got hooked on this. I used to come home from work and start playing on a Friday night and would still be playing at 10.00 o'clock the next morning with my wife having fallen a sleep on the sofa. I always thought I could do better than this game and set about writing my own. 1st on the Amstrad and then

on the Amiga. I was always making changes to the game and improving things as my brother would play test it for me. Anyway then come along kick off, championship manager etc and I found I was playing games every waking hour and my programs would get laid to rest. Every now and again I would start programming a new version improving on the game and the gameplay etc and so I never got one finished. I also found to time to produce a daughter in this time. Last year I had a GP2X which was designed for emulators so I thought a football management game would fun to play on this (plus 4 emulated) if it was designed write so I set about writing for this machine in mind. What I mean is the game that I am writing for the Plus 4 will play easily



on this as I am trying to make all game choices are cursor and return key controlled on the plus 4 with the joy pad and fire button on the GP2X. Got to mention also I have dabbled with other game formats as well. I still have a copy somewhere of knightlore which I started to re-write and completed 70% - 80% of it. It was good it had every room and you could find the items and enemies etc . I should have finished this one but it was for the PC only and I lost interest.

Q. How far through the football game design are you

Its probably about 30% now although the team data will have to be updated before its finished as there would have been promotions and relegations in that time. I do try to do a little bit every other day.

Q. Can our reader be of assistance in the completion of the game

I am always open to suggestions and have always thought its to hard to do a game on your own. So if anyone has any ideas please contact me through my website.

Q. Do you plan to create further games for the c16 and plus 4

I have nothing in mind at the moment as I have started decorating and the wife wants me to do the whole house, Hmm. Although saying that it gives you time to think so who knows.

Q. Does the football game work on the C16 only or will the game run on the Plus 4

The game will only work on the Plus 4 or a C16 with memory expansion. For those with an un-expanded C16 you can purchase memory upgrades from www.CommodoreC16.com There that's a bit of business their way.

Q. There is an awful lot of confusion about the C16 and plus 4 are they compatible games wise

Most games will work on either machine. Unless it's stated Plus 4 only. There are only a few C16 games that will not work on the Plus 4 due to the fact of where specific graphic data is stored in memory etc.

Q. What is the main difference between the machines?

The C16 is a cut down Plus 4. It only has a quarter of the total memory of the Plus 4 which leads to 12k available to the user where as the plus 4 you get a whole 60K. Also the Plus 4 has the extra rom packages, Spreadsheet etc. The C16 has the breadbin design like the C64 and Vic 20 which a lot of people prefer, myself personally I love the Plus 4 design as its very stylish and comfortable to use.

Q. <http://www.commodore-plus4.co.uk/index.htm> you run the website for Commodore 16 and plus 4 machines what do you hope to accomplish from the website.

I just want people to have the information about the machines and may somehow be able to relate to it. I know there is other sites out there but as we know websites come and go so the more information out there the better. Also I just want to feel that I have done my bit in trying to keep the memory of this machine alive.

Q. The website also hosts a number of games for the machines with screen shots how many hours did this take to create, were all the screen shots from emulators .

Right 1st of to get this site up and running I used the actual emulated screen shots from the Plus 4 World site which where supplied as far as I know from a guy called Luca. I have started to replace them with my own shots but its very time consuming. I informed him with what I had done. I do try to give something back when I can as I had a few cover scans which they did not have so it's sort of swaps. The site took me quite a while to create as per normal I was doing bits here and there.

Q. Is there a favoured Commodore 16 / Plus 4



emulator

Personally I prefer Yape but others like Vice so I think its just down to the User preference.

Q. Do you think Emulation of older machine is important

Emulation is very under-estimated and very important. People who use an emulator start thinking I used to play this and I had that one etc and then a few of them like me will try to acquire the original machine which keeps the vintage era going.

Q. What do you prefer emulation or real hardware and why

I use the plus 4 emulator all the time but you cannot beat using the real hardware. I have converted my loft into a small room and every other day I go up there a get out one of my Plus 4's to play and test games. It just gives me a right buzz sitting there using one of these.

Q. Can our readers help with the website maybe sending some missing information? what information do you need .



I would like people to contact me, telling me about their time using their commodore, if they still have one, all the sort of information that is nostalgic and maybe a small pic and some brief information about themselves. I would then add some new pages on the site with there pics and information on it, a sort of C16 Plus4 community.

Q. One unique feature about the c16 / Plus 4 range is the TED can you explain what TED is

The TED is the heart of the 264 series. It's responsible for video, sound, DRAM refresh and cursor. The difference between the numbers (7360/8360) is that they were manufactured with different technologies. The 7360 is manufactured with HMOS-1 (251535-01) and the 8360 is manufactured with HMOS-2 (251535-02). Most people will find an 8360 in their machine if they ever open it up. From what I understand there were 3 revisions of this chip. The Ted chip is not very reliable, although I have only come across a couple of machines where the Chip has failed. I seem to get more machines that pass through my hands that have a faulty main CPU(8501).

Q. Commodore 16 Commodore plus 4 is there a name we can refer to these machines as, Also didnt Commodore release the 16/ plus 4 in Europe under another name, do you know the reason for the name change, and were they essentially the same machines just re- branded

The C16 release in parts of Europe was also known as a C116. This had a completely different look. It wasn't very reliable and looked more like a Sinclair. The Plus/4 was originally named the Commodore 264 during prototype stage, and extant units bearing

the 264 nameplate (some with and some without the integrated software) have been reported by hardware collectors. An unreleased Plus/4 family prototype, the Commodore V364, included Voice Synthesis hardware and software. In Denmark the Plus/4 was used in a bundled product from the then-national tele company (now TDC A/S) to help hearing impaired communicate over telephone lines

Q. Many readers use E-bay or similar if our reader is looking out for a Commodore machine what buying tips can you give

Ah Ebay love or hate it. I source a lot of my items from Ebay. It can be hard as if you are a collector once you get passed about a 100 games you have to start buying bigger bundles just to pick up a couple of software titles you don't have. Some good tips are as follows. When you do a search always type in the following Commodore C16 , Commodore 16 Commodore Plus and do a search on each one. Also make sure the search is in all categories as people don't always list in the right place. Also try replacing Commodore with Commodore as this is quite a common spelling mistake. And last of all try a search doing a search on people who live not to far from you as you can save a lot of money this way. I have picked up items which are listed as Pickup only and superb prices.

Q. Do you think in years to come the machines will attract a premium price like antiques fine art or paintings .

I would love to think so as that would mean I am sitting on a possible gold mine for the future. But there were about 400'000 of these made so I doubt they would make anyone rich but who knows. The ZX80 now attracts a few hindered pounds so another 25 years or so and I what I have now my subsidise my pension.

Q. Do you think Commodore were right to release the C16 and plus 4 at the time they did without the proper software backing .



Everything about the C16 Plus 4 release was wrong. It wasn't just about the software, there was various hardware problems, lack of compatibility, poor marketing and top of that you had the Speccy and C64 going so strong. Still because of this the Plus 4 and C16 are now more of a collectors' item than the Common C64's etc.

Q. Do you have any final Comment to our readers?

If you have an interest share it. People love information and would be lost with it. Don't throw things away. One mans junk is another's treasure. EBay it. You would be surprised what people buy. And remember please send me what information you have and would also like to share with others.



TND Creating music with DMC
http://www.redesign.sk/tnd64/music_scene.html

Created by Richard Bayliss
 with Special thanks to Rio / Rattenrudel

PART 2

Commodore Free would like to thank Richard Bayliss for his permission to reprint this guide. Many users would like to make more of these machines, we all have various talents and if you felt inspired to create music on a Commodore 64 where would you begin, in this guide you are lead through the various options, for creating music with versions of DMC music editor

The Guide has been broken down in sections the disk image that accompanies this series is available from here
www.redesign.sk/tnd64/DMC%20Music%20Editors%5BTND%5D.zip

the disk contains
 DMC V2.1 (GRAFFITY), DMC V4.0 (GRAFFITY) + Docs (By Richard), DMC V5.0, DMC V5.0+ (CREAMD/C64.SK), DMC V5 PACKER, DMC V5.0 SCANNER and DMC V7.0 (GRAFFITY+UNREAL)

- 2.2.2 Wavetable
- 2.2.3 Pulse / PWM

2.2.2 Wavetable

By pushing SHIFT_R + RETURN, you will switch in the Wavetable below (##, WV, FX). The first column shows the wavetable position. The second column have to be filled up with Waveforms or Commands (like Reset, Loop etc.). Accessory parameters will be

##	WV	FX	##	WV	FX	##	WV	FX
00	00	00	00	11	00	00	11	03
01	00	00	01	91	00	01	91	00
02	00	00	02	00	00	02	00	00
03	00	00	03	00	00	03	00	00
04	00	00	04	00	00	04	00	00
05	00	00	05	00	00	05	00	00
06	00	00	06	00	00	06	00	00

##	WV	FX	##	WV	FX	##	WV	FX
00	11	00	00	21	00	00	41	00
01	11	03	01	91	00	01	91	00
02	11	07	02	00	00	02	00	00
03	93	00	03	00	00	03	00	00
04	00	00	04	00	00	04	00	00
05	00	00	05	00	00	05	00	00
06	00	00	06	00	00	06	00	00

written in the last column.

The small examples above shows some possibilities, how you can fill up your wavetable. You can try to add these values simple by writing the numbers in it at shown position, and you can test it by pushing SPACE key.

Every 8 bit parameter in the wavetable contains informations about the different Waveform-

Ringmodulation-, Sync-, KEY-Bit for every channel:
 The Low Nibble (4 bits right) represent following parameter:

- Bit 0: Key-Bit (or TEST-Bit - activating ADSR of OSC)
- Bit 1: Sync-Bit (synchronizing fundamental frequency of 2 OSCs (Channels))
- Bit 2: Ring-Bit (activating Ringmodulation only for Triangle-OSC using in combination of 2 OSCs)
- Bit 3: GATE-Bit (activating GATE or not)

The High Nibble (4 bits left) represent the waveform type:

- Bit 4: Triangle-Bit (activating ADSR for OSC)
- Bit 5: Saw-Bit (activating ADSR for OSC)
- Bit 6: Pulse-Bit (activating ADSR for OSC)
- Bit 7: Noise-Bit (activating ADSR for OSC)

So following Waveforms are possible:



You are able to combine Triangle, Saw and Pulse waveforms:

- 3x: Triangle + Saw
- 5x: Triangle + Pulse
- 6x: Saw + Pulse
- 7x: Triangle + Saw + Pulse

Notice that the last combinations sounds nasaly (thinner) to a 6581 SID.



While testing the examples above you will notice that Pulse sounds (41 - which activates Bit 0 and Bit 6) will not be heard (if you press SPACE), that's why we haven't defined a Pulsewidth yet. See chapter below.

The only Waveform which can't combined is Noise, because higher values than 8F will setup you jump position: 9x (Ax,Bx ...) and x represents the count of the steps back. Ax will loop x + 16 steps, Bx will loop

x + 2*16 steps further and so on, so that you are able to jump in a huge range using other wavetable startpoints too.

Wavetable start points can be set for an instrument by writing a value under ## on the right side on screen (You have to leave the wavetable first).

Notice if there is empty space in wavetable, empty instrument in front of another will not stored if you save a song! Remember this and don't confuse a hexadezimal parameter with a decimal number.

For our first instrument we will set the start point at ## 00 and create a Pulse Loop:

```
## MV FX
00 41 00
01 91 00
02 00 00
03 00 00
04 00 00
05 00 00
06 00 00
```

2.2.3 Pulse / PWM

Not hearing a sound doesn't mean there isn't any playing. You will see, that we have only to adjust the Pulsewidth of that pulse sound, because a pulse wave at '0' will not change amplitude. So first we setup P parameter. P will setup the pulsewidth between 0..F. Value 0 means low, 8 is middle and F is highest. First we start with P = 8. Then we change to P = 1. Do you hear the difference? Play around a bit with this values.

```
ADSR L P SPEEDS L
00EF 0 8 000000 0
```

```
ADSR L P SPEEDS L
00EF 0 1 000000 0
```

You can add numbers for the six SPEEDS parameter "000000" (1..F). The SPEEDS parameter will pass through in a chronological order. You should always start with the first. That first speed value will run to the right border (max pulsewidth) in a defined speed:

```
ADSR L P SPEEDS L
00EF 0 8 100000 0
```

A next value will run in the other direction back until the left border (min pulsewidth) is reached. Further values will repeat the both directions again. If a value is defined as 0, it will stop on the last border. Higher speed values gives the Pulse tone more fat sound and more vibration, because the speedtable runs faster.

The L parameter in front of P will define the borders of min and max pulsewidth for modulation. Higher values will cut down the area to swing. Higher values will produce a nice vibro effect. If L = 7 it will not change the pulsewidth anymore.

So let try this little example for comprehension:

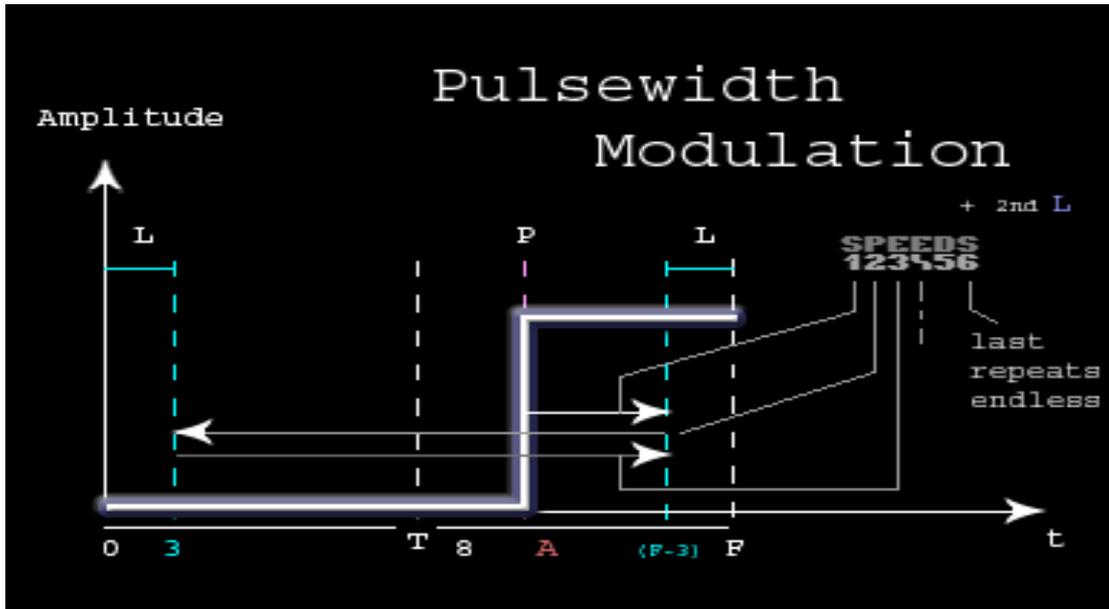
```
ADSR L P SPEEDS L
00EF 6 8 123456 0
```

If a pulsewidth will setup behind these borders and runs away from them, the pulsewidth will repeat one direction 16 times. I'm not sure if it is the intention. Same happens, if L is higher than 8. It will change to another effect.

The second L parameter behind this 6-STEP-SPEED represents the speed fine tuning of a PWM. A entered value will start the PWM in very small speed changes (it isn't necessary to setup 6-STEP-SPEED values before). It will run the PWM in both directions automatically. The fine-speed can be controlled between values of 0..F. The fine-speed value will be added up to the values of 6-STEP-SPEED PWM.

For the whole understanding, please take a look at the following graph:

CONTINUED NEXT MONTH



C64TCP Review

Well my unit finally arrived, and to be honest I didn't have to wait very long from placing the order till the unit popped through my letterbox. In fact the total time was just a few days after payment notification. I was even offered a refund as Ahmet Zeki Eymou didn't know if he would be able to continue production of the Hardware and software or even have the time to provide full support.

Size matters

The unit is quite small, around the size of a small deck of playing cards or if you are a smoker a standard pack of 20 cigarettes. The unit needs a 9 volt power supply or adaptor (this has to be purchased separately and will be needed to sourced from you country) the adaptor I purchased is a multi adaptor from a well known UK electrical supplier, Later I found a small adaptor with the correct connector and power output to run the device.

Its important to set the correct polarity and my adaptor being multi purpose permits the user not only to set the voltage but also the polarity of the connections with the pin in the middle being + and the outer edge being -

INSTALLATION

Installation is easy double click on the set-up and click next



the install will walk you through the whole process with ease once installed click close I noticed no icon was installed for C64TCP and I had to create my own shortcut, remember where the files were installed!

C:\Program Files\C64TCP\bin



By default you need to drag the icon c64tcp.exe to your desktop, I also noticed I didn't have full access to the bin folder where all the d64 images were installed I only had read, If you log on as an administrator you do have full access so you

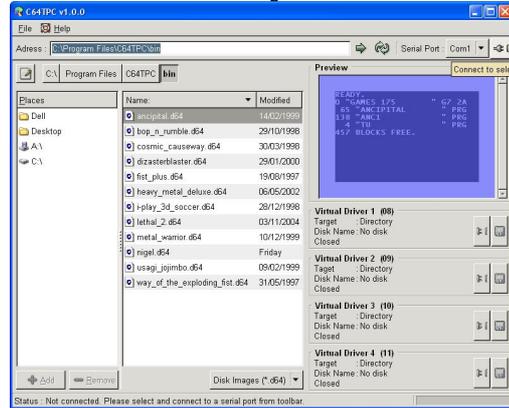
will need to set this manually if you use a lesser account for normal everyday use (you should do as good practice) In the start menu is a CTK+ folder item clicking in there revealed an application to change the look and feel;

you can play with this yourself as it alters the style of the program but doesn't seem to allow anything other than setting defaults ok main program then

USAGE

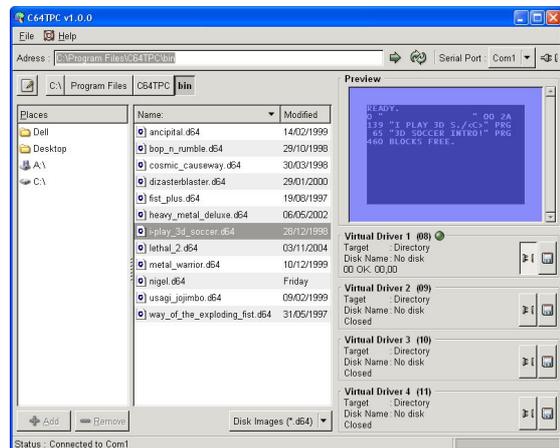
Connect the serial cable to the pc and the device to the c64 and power on you should see the device has 2 amber lights showing no connection

We need to load a disk image into our virtual disk



click on the serial icon it should read connect to selected device ensure your coms port is selected default is com 1 on the pc this should be labelled up com1 or com2 most modern pcs will just have a com1 or only usb so you need a usb to serial port adaptor although I don't think this has been tested!

On the Name select a d64 you want to load Then click on the connection button



you notice the green light goes on and the device plugged into the c64 changes the amber lights go out and the green light comes on the device is ready and connected. you also see that the preview displays what is in the d64 file on the pc preview window now mount the disk by clicking on the disk button



notice the display has changed again the target now shows the d64 image file name



ok we are ready for the c64 side lets look at a directory

on the c64 type load "\$",8 then press return
wow whats happened the c64 output is wrong this really threw me for a while lets see if I can help aout here a little

```
0 "                               00 2A"
0 " BLOK DOSYA ADI TIP "
0 " -----"
0 " 139 I PLAY 3D S./(C) PRG "
0 " 65 3D SOCCER INTRO! PRG"
460 " BLOK BROS."
```

Ok its not what I am used to seeing on the commodore 64 its also nothing like the preview but the

BLOK is obviously the block size
DOSYA ADI must be program description
TIP This must be the file type
BLOK BROS Must be bytes free in the d64 image

You know if you don't mount the disk as you get something like

```
0 "SECILI HEDEF ICIN LISTELEME GERCEKLE
STIRILMEMISTIR."
```

When you display the directory (no idea what it means probably no disk image has been mounted)

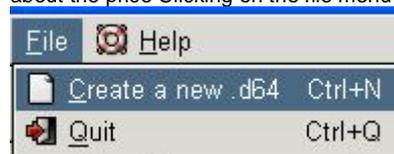
So to the load the first file in this example I need to type Load "I PLAY 3D S./(C)",8 and press return



notice the virtual driver has changed and shows a green on and a red loading light, the c64 hardware shows 1 amber light and this denotes the c64 is loading from disk this took around 2 mins to load notice on the pc you see a real-time progress bar

the C64 comes back with a READY prompt you can now run the application and it plays perfectly!
The device doesn't support turbo loads so you need to ensure you don't have disk images with turbo load enabled also it doesn't seem to be fully IDE 64 compatible if you load a disk with the ide plugged in on device 8 it will fail after a few seconds I have loaded disks in other virtual drives 9/10/11 fine but 8 fails so you have been warded.

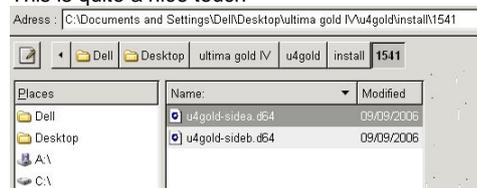
It's a very neat piece of hardware about the size of a box of playing cards or cigarettes and can be supplied with serial port lead for pc so I can complain about the price Clicking on the file menu



permits the creation of d64 images I have created some BASIC applications and they save and loaded fine so presume other applications will behaved as well because they load fine, on the device is a reset switch should the application hang on the pc or some other misfortune become on the user flicking the switch will reset the c64 end and even keep the disk image loaded and mounted on the pc side

Metal warrior is a multi load game and that functioned without problems obviously I don't have time to test every application.

This is quite a nice touch



notice how you can drill down the folders on your machine and the bar changes at the top displaying them here I am in the folder

C:\Documents and Settings\Dell\Desktop\ultima gold IV\u4gold\install\1541
I can easily move back one folder to C:\Documents and Settings\Dell\Desktop\ultima gold IV\u4gold\install

By just clicking install or even back to C:\Documents and Settings\Dell\Desktop By clicking desktop button I liked this feature, although this disk image didn't load because it uses a turbo load

UPGRADES

Obviously I would hope the application is further supported and turbo load would be supported if there is any further development but as a version 1 this is really promising if you have a pc and want a really big disk drive to play games then I would suggest his device even without the support.

Further only d64 files are supported and it would be nice to have other formats even d81 support added

Interview with Dany Wild DJ And remixer



COMMODORE FREE Please introduce yourself to our readers

DANNY WILD Hi , I am Dany Wild an electronic Music Producer and Commodore freak for the past 27 Years.

CF. Can you tell our readers how you came across the Commodore brand of computers?

DW. The c64 was the one and only Computer for German kids in the 80s , i received my c64 in 1982 .

CF. Do you still own and use a Commodore machine?

DW. Yes i use my original C64 for some sound programming and to have fun with the original Commodore Flavour. Sometimes i also watch old Demos and play some Commodore Games.

CF. What is so special about the Sid sound?

DW. He sounds awesome. very precise , many sided in Sounds . and Sounds very special!

CF. Are you a professional dj/remixer i.e. is this your main income?

DW Yes . i create a lot of Club music, mostly Electro House . My home base Label is Sugaspin Rec. in Hamburg .I also create other different Projects on other international Labels.

CF. What hardware and software is used for the remix process?

DW Yamaha 02R Studio Digital Mixer , PC with Logic , some Hardware Synth Waldorf Q , Yamaha AN1x , NordLead and as I need some older analog Synth sounds I use some very good VST Plugs like the Quadra Synth (very good SID Emulation) , EXS24 with my own Sample Library of SID sounds .

CF. Do you just remix SID tunes?

DW No . mostly i Remix other Artist of the international Club Scene

CF. How do you decide what samples to use in the

remix and which sections of music to include from the original composition?

DW Ohhh difficult to decide . i test so many sounds and parts before i finally make a choice.

CF. Do you Sample the real Sid sounds to produce the remixes or are the sections re-played on synthesisers?

DW. I do both.

CF. Your music is very heavily Compressed, is this a conscious decision, can you explain compression to our reader?

DW. Yes absolutely . I love massive compression ! For the same channel i often use three different compressors to find the right result

CF. How much commercial success with any of our remixes?

DW. "Success" is relative , I don't make Millions of Euro if that's what you mean... lol I had some Number one Positions with my Music in the charts .

CF. Do you create original music of your own compositions using Commodore Machines?

DW. No i didn't transform my Club Tracks to SID.

CF. Do you create SID music files our user can listen to?

DW. Sorry "No" I haven't.

CF. Do you have any links to any of the remixes you have created our reader can listen to?

[http://www.danywild.com/commodore/danywild_retro_commodore_sid_remix_collection-
www.danywild.com.zip](http://www.danywild.com/commodore/danywild_retro_commodore_sid_remix_collection-www.danywild.com.zip)

CF. What is your favourite piece of music and what is your favourite SID file?

DW. I like so much Music and SID Files , my favourite Club Song this weekend is "If you Love-Jewelz & Meesh" and my all time Favourite SID Music is the Stuff of Future Freak from Dexion ! yeahhh i love his style and i wonder why his music

isn't so well known.

CF. If our reader is musically inclined what is the best way to start remixing Commodore Sid files?

DW First you need much enthusiasm for the good old Sounds and Songs ! Then you must know what you want to do with it . Do you wanna play it with a Guitar or do you wanna combine it with Trance Mellodys ?? My way is definitely that i wanna hear the old SID Sounds and Mellodys in my C= Remixes . I combine the SID with my Club Style and the result is that i can play the old SID Songs with a new flavor at the Clubs and Partys .

CF Do you have a website with downloaded remixes or even a CD you have with the remixed files?

DW No , i didn't release my SID remixes commercial . If someone wants to have it contact me or use the download link
http://www.danywild.com/commodore/danywild_retro_commodore_sid_remix_collection

www.danywild.com.zip

Contact me here :

www.danywild.com or www.myspace.com/danywild

CF Do you have a list of clubs where you ar due to remix in case our reader wants to see you live?

DW Different , at the moment i play as resident DJ in the Gigaparc in Dülmen Germany

CF How long have you been a Dj/remixer and have things changed much since you started?

DW I started work in 1989

CF. Do you think its important to promote commodore machines?

Yes , because its better that Commodore exist as a Computer Company than we say they are dead and someone uses the Logo for Coffee machines. Also its good to see that the new Commodore Company cares about her history and do something for it.

CF Some people would argue that you were using other peoples creativity for your own gains would you like to comment about this?

DW I think they didn't understand me , I love the old Tracks and want to keep the SID/Commodore spirit alive . The only way to do that is to use the old Songs and Sounds .

CF. Do you think people look at Commodore related music and just think its all for geeks?

DW If you're listen the original SID Tracks , "Yes" they are geek stuff . Thats why i combine it with fresh Clubby Beats and Bass . Now the younger Generation / people accept it and Dance to it.

CF do you have any final comments you would like to add

DW Keep the good old Computer Times alive , Atari , Commodore , Amiga , Apple , whatever .

In good old C= Demo Tradition :

Greetings to : Luke & Sabrina , Commdorefree.com , Sugaspin Rec. , Enno Coners , noname.c64.org/csdb , Commdore Gaming , Commodore Billboard , Retro Mag , Framekiller , Paralax Board , Forum64.de , Thomas / Radwar , Bit-Boys , Dueco , c64-online.com and to all the SID / C= Freaks out there !

THANKS for you time

=====

Dany thanks I think the tunes are great I have had some playing while at work I like the heavy compression it works very well with these tracks



WE ARE FAMILY - The 2nd Coming (commodore plus 4 DVD compilation) (c) by Absence and Wilds 2008

COLOR/PAL/4:3/105 MINS/SUBTITLED/MULTIPLY AUDIO/DVD-R

You can download the new Commodore+4 DVD titled "WE ARE FAMILY - The 2nd Coming". It contains 10 demos and 92 photos, including director's audio commentary for demos. The commentary is displayed as subtitles and voice channels, the demos have English, some have Hungarian/German/Italian versions.

The approx. 2 hours long DVD contains works from the following groups:

8 SHADES OF BLACK VARIOUS VARIOUS
NOTIZEN AUS DER PROVINZ TEK GERMANY
ADVENTURES IN MONO ABSENCE HUNGARY
ZENITH OF PUBERTY TEK GERMANY
OLDSCHOOL ASSASSINS HUNGARY
THALASSA FIRE ITALY
CRACKERS DEMO 4 VARIOUS VARIOUS
SHADE WILDS HUNGARY
MONOPSY 2 WILDS HUNGARY
THREEVE BAUKNECHT GERMANY

Bonus Material:

AWARD CEREMONY SCENECON
PHOTO GALLERY
WE ARE FAMILY PROMO YOU TUBE

The music for the main menu was composed by
CSABO / LOD

Free DVD

http://plus4.emucamp.com/features/Commodore_Plus4_Demo_Collection_DVD_The_2nd_Coming

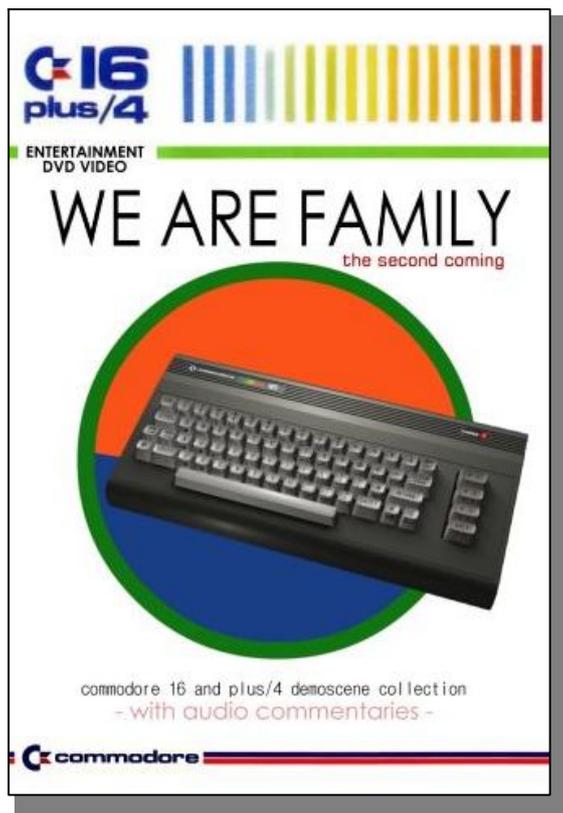
COMMODORE FREE

The dvd has been compressed with 7zip free zip software the first thing you need to do is to download 7 zip from here
<http://www.7-zip.org/download.html>

Having never used this before, I thought this may be useful, the files are available from Linux and Windows so download the correct version for your system then install the software

ok I am using the windows version so these notes are for windows but I presume are usable for both versions Download the 5 individual parts from the webpage then put them into the same folder on your system run 7zip and navigate to the folder within 7zip where your downloaded files are

Right click on the first file and select combine files, this will create 1 file from the 5 split files once this has been down loaded you need to decompress the file as this has been zipped also, so select the large file that has been created then select extract to extract all the DVD content



Now use whatever cd copying software you own to copy the folders dont copy out the files copy the whole folders of

AUDIO_TS and VIDEO_TS

to a DVD once finished you should be ready to place the DVD into a player, and sit back and watch the action.

There are some truly amazing demos on this collection at the moment shades seems to be my favourite, it features digitized dancers jumping around to a superb soundtrack all the dancing sequences seem to be on time with the music very nice piece of work, rather than reviewing the disk I would suggest you just download and create your own version and be truly amazed

Interview with Nightlord Commodore 64 programmer

COMMODORE FREE: Please introduce yourself to our readers

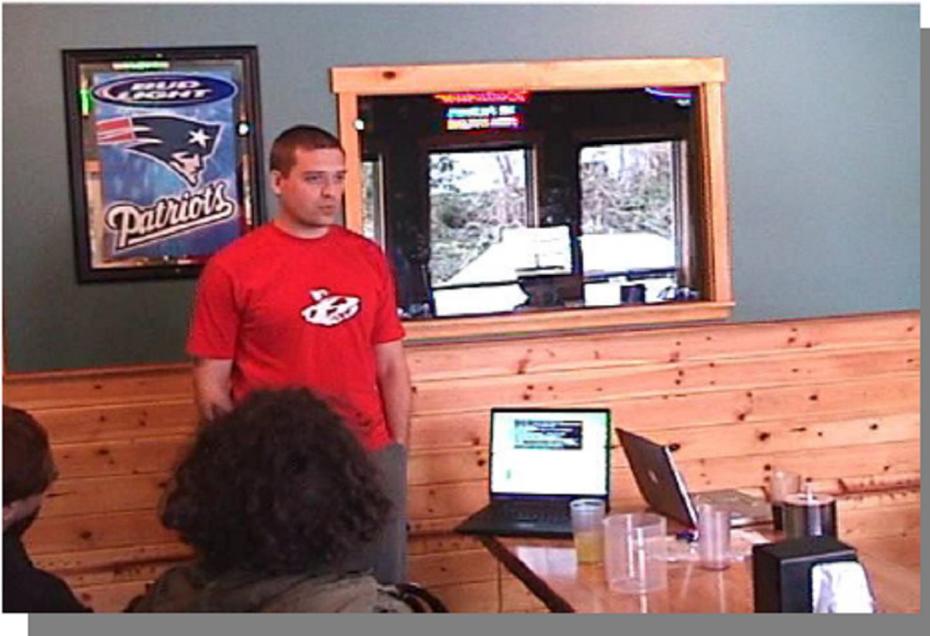
NIGHTLORD: My name is Bilgem Cakir and I am more widely known as Nightlord/Glance. I am a coder mostly and I occasionally do graphics and music. I also write for various publications from time to time.

you tell our reader about these groups?

NL: Glance is a relatively new group that released its debut demo called Living in 2005.

I think it is one of the few (few meaning maybe 10) active groups in the C64 demo scene that has a

potential to do some serious technical demos. Unfortunately we have somewhat disappointed ourselves and our friends and in the scene by not releasing our second demo, but hopefully we will do that soon enough. It is a group made of sceners that had been active in other groups before. My fellow group mates are



CF: Should we call you Nightlord?, where did the handle come from?

NL: Yep you can call me Nightlord or Bilgem whichever you like. The handle comes from my teenage years where I was trying to come up with a handle that had to do with night and darkness (since I mostly coded at nights) and with a powerful title (possibly because of low self esteem :)

CF: You were a coder with Glance and Civitas can

Arcane (gfx), Datura (gfx), Endo (code), Hydrogen (gfx, msx) and Skate (code). There is also a surprise addition to our team recently but we have decided to not announce it officially until we release our demo in which he takes part (ahhh the games we play :). So I will not tell who he is but I send my greetings to him as well.

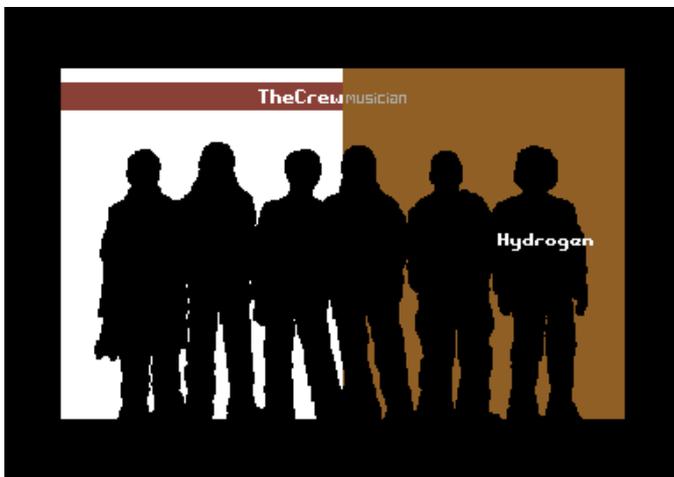
Civitas is a group that I used to be active in during 2003 - 2005 (I released three demos and a few diskmag articles). Unfortunately in the recent years I failed to keep in touch with them. I do not know what they are doing nowadays or their most recent member status. But greetings to my good friend Zeitgeist over there

CF: What is your first experience of Commodore machines

NL: Hmm I know this part tends to be boring in the interviews and I know you have to ask it anyway :) So let me keep it short by saying, I got my C64 back in 89. The first game I played was Commando. After about a week I started coding BASIC.

CF: Are you still an active Coder, what has been your most recent work?

NL: I would like to call myself an active coder yes :) Even though in the demo scene I do not consider someone active



unless they have released something in the last 2 years and the very fact that you are asking this question makes it harder for me to call myself active :) My most recent "released" work is the Living demo by Glance (2005). In the meantime I was a part of the demo review diskmag called "Nordic Scene Review" but that is not the same thing as coding. My most recent "close to being released" work is the C++ or cepp compiler project. I hope to release it at the CommVex 2008. Other than that there are off course many unfinished projects or ideas (and even a few games) in my hard drives waiting to be released. Just like most of the other coders out there.

CF. What is your most technical achievement with the Commodore 64

NL: Hmm I think I really do not have anything big enough to call a big technical achievement, but I guess I have three smaller technical achievements that I feel good about. One of them is the "moving light source vector" part in Mist/Civitas(2004). I have not seen that effect in any other demo in C64 so I think it is an unpopular world first :) (not that it is too hard to do or anything). The second one is the "doom" part in Living/Glance (2005) a coder I respect

a lot (Oswald/Resource) called it "the best doom effect" in a comment and that is an achievement for me. The third one is "3d dot torus" in Living/Glance which happens to be the world record in real time 3d dots effects which another one of my favourite coders (HCL/Booze Design) said he jumped when he saw (Again a big moment for me to read him saying that).

I know these "achievements" sound good when you read them in text but believe me they are not that good. Each one of these effects could be produced much better/cleaner/ faster.

I also have a managerial achievement :) In 2005 I decided to go to Floppy party in Sweden and had 10 days to make a demo. I had a very very careful planning and implementation and was able to complete the demo single handedly just about 2 hrs before the deadline :) It turned out to be an OK demo too. Even though it is not a huge success I never ever matched the efficiency level I had at that project in any other project.

CF. Do you code for any other machines, Commodore or none commodore?

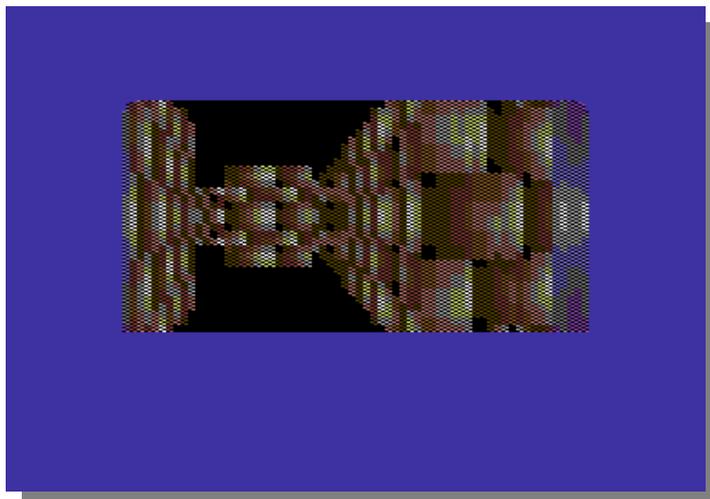
NL: Well, at work in past I coded for a zillion different embedded cores for different consumer products (mostly digital TV receivers in UK). I also coded for PC games professionally and nowadays I code in the Windows empire (I duck here from incoming rotten tomatoes from Commodore fans :))

CF. What exactly is C++ is this a Commodore extension of the C++ programming language?

NL: Well C++ (you can read it as Commodore plus plus) is two things. A language and a compiler for it. The Language part is a carefully selected subset of the C++ language with a few minor Commodore specific extensions. It is somewhat hard to explain the language to people who do not know the C++

language. In short, it is a language that has the same syntax as C++ but supports less features. I tried to select the subset so that it covers the most used aspects of the language (like classes with constructors, destructors, public and private methods and attributes, and new/delete) and left out the parts that would be slow or memory inefficient to implement on C-64 (like templates and inheritance are left out).

The notes inside the parentheses in the previous sentence are intended for those who know at least a little about object oriented languages (C++, java, C#). The main goal of the language is to enable programmers to write logic intensive object oriented parts of their code in C++ while using assembly to



optimize the most performance critical parts. The language is designed to be easily integrated with assembly. You can call C++ code from you assembly and call assembly routines from your C++ code easily.

CF. How does C++ Differ from the C programming language?

NL: C++ was originally designed to add Object Orientation related features on top of C language and was aiming to be still pretty fast by being close to hardware. It mostly managed to achieve this aim and is the language of choice in most of the PC software that require to be fast (like games for example). Today it is mostly considered to be a pretty low-level (meaning close to hardware) language compared to the .NET languages or Java. But unfortunately it still is a pretty high-level language for 6502 CPU. That's why I had to cut some of its features while defining C++.

CF. Why was there a need for a Commodore version of C++ language

NL: I ran into the need while trying to make a strategy game for Commodore about 3 years ago. For any serious piece of software in C64 for many years, almost only choice was the assembly language. For most things anything else will be too slow. But even though assembler is suitable for efficient graphic algorithms or cycle exact raster code, it is not suitable for code that has complex logic and objects with complex dynamic lifetimes. This happens for example in a strategy game where you create many buildings and units that live, do stuff for sometime and die. It is hell to try to manage that in

assembly. These kinds of stuff are more suitable for higher level Object Oriented languages.

In recent years there have been attempts at making higher level (but not Object Oriented) languages. There is the cc65 C compiler, and Slang language for instance. I have not used cc65 but it is used in some serious projects so it must be good. I have not used Slang either mostly because it does not seem to have the OO properties I required. Plus I had been looking for an opportunity to try my hands on making a compiler for some time. When all these conditions came together I decided to make my own OO C++ compiler.

CF. Does the language run natively on a Commodore 64 or does it run on other hardware to produce Commodore Code?

NL It runs on Windows or Linux PCs. Your source files are all on a PC and you compile them with cepp (The C++ compiler) that gives out C64 assembly files (still on PC). Then you assemble them with Acme cross-assembler by Marco Baye. Then you get a c64 binary .prg file which you can run on a real C64. So this tool is designed to be used in cross development scenarios.

CF. Can the language make use of external commodore hardware for example the SCPU or CMD Ram link?

NL: Well the compiler generates 6502 code. I have no idea how RamLink works. The resulting code will off course run on a SCPU but won't be able to use the extended SCPU commands.

CF. Would you consider extending the language to support further hardware?

NL: If you mean support for SCPU as in the "compiled programs can use SCPU features or its bigger address space", it might be possible to do relatively easily. Although I must say I do not see a huge demand from the thousands of SCPU developers out there.

If you mean supporting other CPUs like Z80 or 68000, it is not as easy. I do not consider doing it.

finally if you mean supporting the compiler itself to run on a Commodore machine, than I can confidently answer "no". Parsing C++ code and generating binaries on Commodore is something I will not try to do.

CF. is the c= ++ source code available for download? if so where? if not, will it be available?

NL: Yes it is under GNU GPL license. It will be available in the official Cepp site

www.cepp.nightnetwork.org.

The site will open in the end of July at CommVex 2008.

CF. Will the Code be open source and therefore free to modify?

NL: Yes. The code will be released Inline with GNU GPL license agreement.

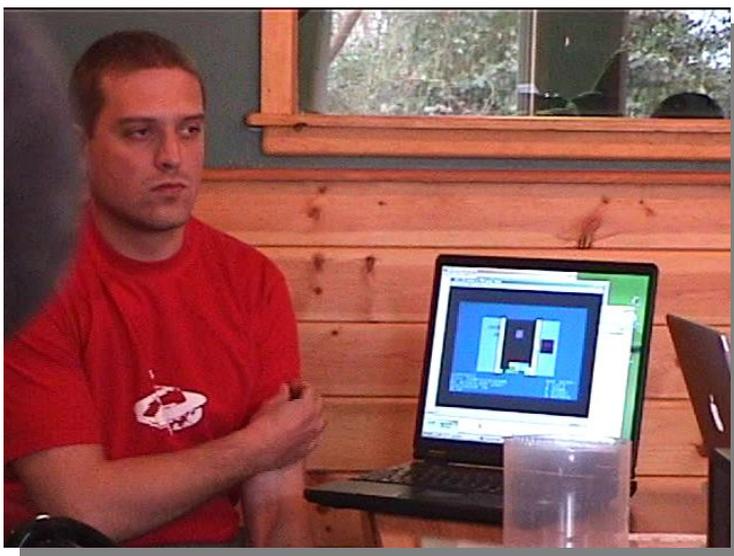
CF. You have produced a Tetris clone with C= ++ will this Tetris clone be released as a standalone application?

NL: The Tetris clone (creatively named Ceptris) is a proof of concept that the compiler works. I will probably put it somewhere in the web site as well as CSDB but it should not be considered a game really. It is an example for other people to look at. Especially an example of how C=++ code and asm code are used together.

CF. Taking the Tetris clone you created in C=++ how long did this take to create in C= ++ and how long would the same version take using Assembler?

NL: Hmm it is hard to answer exactly but I think it took about 5-6 hours to write Ceptris including the C=++ and assembler parts. Since it has no graphics or sound it was a very short project. Had I written it in assembler I guess it would take somewhere in 12-14 hours for me. But keep in mind these numbers and ratios apply to me. Someone else might be more fluent in assembler and less comfortable with C=++ and actually take longer to write with C=++. It also depends on the unique types of problems in the particular game. Tetris does not really have some of the problems that really inspired me to make the compiler in the first place. A real time strategy game has those problems but is too big a project to choose as a quick proof of concept project for my compiler.

CF. You mentioned in a demo at Mossycon that you would think C=++ would be used for the logic code in a game and assembler for the speed intensive part so you would use C=++ to build the artificial



intelligence is this still how you see language being used?

NL: Yes the main areas I see for the language usage are AI, logic and dynamic memory management areas. It might potentially be useful in various utilities or non-game applications if some UI widget libraries get developed. I hope this will happen as it is easy to write a widget library or a graphic library and provide a C++ interface to it. In other words it is easy to write

some assembly code and make it look like C++ classes to your C=++ code.

So people could write a UI framework that has forms and buttons and edit boxes etc. and others could than quickly code utilities or even diskmags using those framework libraries. So in a wonderful world this could increase the reusability of code in the Commodore world and improve the efficiency and collaboration of programmers. In the real world this might be me hugging a tree.

Another area I can see the language being used is some certain demo effects where there are particle systems or the like

CF. What sort of programmer are you, for example have you purely created demos?

NL: In the Commodore world, I have only released demos until now. So I am a demo coder yes. I have unfinished game projects in the queue too. I have done a few graphics and music releases as well. I guess I am OK as a musician and showing some minimal promise as a graphical artist as well because people do not go and puke after being exposed to my work.

CF. Do you have a favourite Demo or application?

NL: I have many favourite demos: Tower Power/Camelot, Soiled Legacy/Resource, Krestology/Crest, Dawnfall/Oxyron, Mathematica/Reflex, 100000 Light Years from Earth/Fairlight, Boogie Factor/Fairlight, Throckmorton Device/Triad and Living/Glance are a few that I recall right now.

CF. What Commodore Demo or applications have you seen and thought WOW how is this done?

NL: Again many... But I think the loudest I shouted and jumped from my seat ever was during the round vector object part in the demo Tower Power/Camelot back in 94. Another recent one was during Artefacts/Plush in the landscape part.

CF. Do you feel its acceptable to disassemble other code to learn how techniques were used?

NL: In the C64 I think it is (I am not sure but I think it might be illegal for some PC programs to disassemble them). For C64 it is quite a good learning method. But how effective/possible it is really depends on the type of code you are looking at. For instance many raster effects in demos are easy to look and learn from since they always use the same registers in various ways. You can actually figure out what is happening there pretty easily. On the other hand it is not so easy to learn from a math based effect (like vectors or doom effects) since they are heavily optimized by the use of tables. So all you see is "ah here the coder reads some value from this table than adds it to another value from another table", as long as you do not know what calculations are turned into tables you do not understand much from that code. Off course it is a skill that some are better than others. I am not very good at figuring out other people's code.

Also from the ethics point of view it never hurts to publicly announce it in your own demo, if you have studied someone else's code. It is one of those small

signs of respect you occasionally exchange among coders. A small nod if you will :)

CF. Why has the Commodore 64 survived for so long?

NL: Because of us... All of us. Those who still create software and hardware for it, those who still use it daily to take care of their stuff or for fun, and those who write, read and discuss about it. And I think for every kind of person on the Commodore scape the newer technologies have not completely replaced the fun or challenges we enjoy. For instance C64 coders still enjoy the cycle counting challenge that you do not get to see in new platforms. The users still enjoy the personality and psychological tie they have with the machines that they never feel with the newer machines etc.

CF. Do you think there is an area that the Commodore 64 has not been utilised to its fullest in, be it graphics, music, coding etc

NL: Graphics and Music are fully open ended. There can be a zillion more music pieces made and there can still come a piece (most likely from Drax or Laxity :))that will make you go "Wow". Same with the graphics. I can not really answer for coding. I have been an active demo coder only in the last few years and I do feel challenged and close to the limits of this machines power but it might very well be my own incompetency. You should really ask someone who has been breaking world records for decades. Someone like Crest/Crossbow. He might tell you whether he feels there is less space left to utilize compared to 15 years ago. Whether he feels if this is a moving target or not.

CF. Finally Doom on the Commodore 64, is it feasible and would it be worth the effort?

NL: Oh it is definitely feasible. At least I know I can do it using my already existing doom engine (well doom engine means the graphics engine here, not the game engine). I think it is worth the effort too. In fact I intend to do it sometime. But I must add that I would do a doom style game not the exact same "doom" as it would not be so much fun to me. I would rather design the levels the enemies and the overall game scenario uniquely instead of copying from Doom.

COMMODORE FREE

Pictures taken from Messycon was recorded by Robert and available for purchase on 2 DVD-R in NTSC format, The pictures in this review were extracted from the video, you can contact Robert by the website <http://videocam.net.au/fcug/>

Commodore Scene Meeting report

Robert Bernardo was again making his trips around the world visiting computer shows and clubs in a variety of locations after careful planning and itinerary slots being available Commodore Scene managed to get together and accommodate a meeting with Robert

Robert and Shaun Bebbington made there way from Birmingham and met by myself and Alan Bairstow of www.commodorescene.org.uk at Preston railway station; the train arrived on time, in reality a couple of minutes late but this was more or less on time. So Alan and I loaded bags into both our cars and set off on a small 30 minutes drive to my house.

Once at my house we all unloaded and proceeded to the very un-posh and rather cramped "computer room" little more than a loft conversion but just big enough for us to collectively squeeze ourselves into

Robert told a shocked Alan about his recent heart scare problem and how even in hospital he was trying to convert past commodore users who were doctors and nurses into joining in with a nearby Commodore club event. Robert confirmed he had to take care but was fit and well, Alan had not heard the news, and stressed Robert should take care, we suggested slowing down and Alan said that men just carry on not listening to our bodies.

I followed this up with my slipped and bulging disks problem the lower 3 disks in my spine had slipped and bulging pressing on nerves causing sever pain I waited 2 years then went to seek medical care, Alan laughed and said it's a man thing we expect the pain to just go, and put off doctors, I was on morphine for the pain but now have recovered enough to use just strong pain killers as and when needed, in fact the whole meeting I managed without taking any of them.

AMIGA STICKER



Robert gave us all a self adhesive badge with Amiga logo on and proceeded to show us about 10 Dvd's with Scanned magazines unfortunately the text was all in German and none of us can read German but the pictures' of course were international .

Behr-Bonz VIC-20

Robert said he had something rather special in his bag and Myself or Shaun could test it Robert produced the Behr-Bonz VIC-20 Multicart not just any version but the PAL version, beta testers are still needed as the games have only been tested in an emulator and not on a real machine Robert pointed out. Robert therefore looked rather disappointed



when I started my 1st demo

I tried demonstrating the Behr-Bonz VIC-20 Multicart 127 cartridge games for the vic 20 all on 1 cartridge yes Robert I already had one Robert rather deflated handed the device to Shaun and suggested he try testing it on a spare machine he had back in Birmingham, Shaun agreed to test the device when he had time.

The demo went rather badly although my VIC did manage to boot to the menu, I seemed to have a power problem and the machine lost power and display so I was unable to test further, Shaun lent me another Vic to test out the device but we were unable to find a power supply for this vic 20, so the demo was put aside for another time, as we had other items to look at.

1541 ULTIMATE



I produced a 1541 ultimate device but said that my commodore 64 wouldn't power up with the device due to the amount of power required, we did see the device load and look inside some disk images, although after initialising one of the freezer functions

the Commodore 64 refused to power up due to the drain of the PSU, again this device was put aside for further demo when a suitable PSU was found for the Commodore 64, Alan said he may be able to make a flat Commodore 128 psu power my Commodore 64 and would produce one for the next meeting

We all chatted about the various clubs world wide and wondered why a U.k. Commodore club hadn't been created, going by our clubs

recent get together about 1 every 2 years we suggested that we meet more often and form a proper treasury, have a meeting place and try to make the meetings on weekends rather than midweek as 2 members were unable to attend due to work commitments. Then we reflected that it was no wonder the U.k. didn't have a regular meeting as the 5 of us couldn't even make the commitment we all suggested this must change and soon. Shaun suggested some ways of club fund raising and a meeting place was also suggested.

C64TCP



Next for demo was c64tcp, Alan said he had commitments he needed to attend but promised he would contact us all again and not wait 2 years, Alan was also keen on a club and proper treasury, at this point we said our goodbyes and Alan left in his car.

C64tcp demo actually worked and I showed the remaining members now Myself Shaun and Robert how he device connected and loaded applications from a PC (see full review in this issue for more details of the device) Robert was keen to video the device in action and asked questions about its function, I pointed out development had stopped, but



the device as is had potential even if it wasn't a 1541 emulator and couldn't handle turbo loading games.

DC2N

Next came the DC2N Robert had not seen this device and so questioned why users would still want to load TAP files in real time one a Commodore machine, I pointed out that it was in fact real-time with no speedup of the tape dumps and also said that most games featured turbo loading also it helps preserve games that would soon fail to load from real tapes, also from a nostalgic point of view I still use tapes and am a great promoter of this device that seems to work without problems, is easy to use (although doesn't come supplied with Documentation, I will change this and produce a guide to download from www.commodorefree.com website when I have time)

The DC2N as pointed out allows users to copy commodore cassette games to a digital format TAP files and play them on the device as if they were real cassettes, thus the user experiences loading the Tap files in real time so a cassette that took 20 mins to load would take 20 mins to load Shaun was quick to point out that there would be no tape errors on heads that needed re aligning or cleaning as the files were in a digital format, it was agreed the items was useful for preservation of Commodore tapes and the designer had tested the device on the pet and vic.

We watched a few videos that Robert had taken on his travels and an interview with the 1541ultimate creator Guidion, Shaun suggested the device may be used as a SCpu replacement as internally the device ran at something like 16mhz the interview with guideon also suggested this may be possible. We saw a prototype of the next version with an Ethernet port and some other hardware and software fixes that the designer had implemented into the device.

I said to Robert and Shaun I was still looking for some sort of video titler or presentation software to show text on screen in a sort of cut down PowerPoint style presentation we googled for various items and in the end it was suggested maybe a noter style application could be used, Shaun pointed out and downloaded a couple that looked promising I said I would test them and try them out, and maybe video myself giving the presentation to a shocked audience when they realise the presentation is in fact coming from an Commodore 64 and not a Pc or Apple mac

Robert then asked about the Sound buggy hardware device he saw in the room and said he had never seen one of these devices he asked about its function, I promised to do a review for Commodore Free magazine and upload some of the demo music files as wav's so we could all enjoy them, basically the device is an FM sound module that's controlled by the Commodore 64, Robert took out his camera and made a video of the device and box, but we didn't have the time to load the software and do any testing.

I asked about the state of GeoPublish version 1.1 Robert said he didn't have a copy it was pointed out by Shaun that maybe Maurice didn't like its release as there was no copy protection on the update and thus anyone could use the software without owning a legal copy it seems the software may not see the light of day, Robert said the creator was putting a manual and proper box together the last he heard from the creator was over 2 years ago

We moved out into the garden as the room became too hot for usage in the British sunshine, we tried to contact Maurice Randel on his home number but just got the answer machine, Robert suggested we phone Jeri Ellsworth but again we just got through to the answer machine.

THE END

Shaun did manage to contact Chris Snowden of www.commodore16.com fame, he was sorry he couldn't attend the meeting but was working and also had commitments on the day. He asked if we could try again for a weekend rather than a midweek meeting, we all nodded as Shaun spoke his words out loud as we couldn't hear the phone.

All too soon Robert and Shaun had to leave, I packed their belongings into my car and took them back to the train station, dropping them off we all confirmed that over 2 years is far too long a time to wait to talk to each other and we should do more to promote Commodore machines, again a U.k. club was mentioned, Shaun promised to keep more in touch and even share some programming knowledge. I watched them walk into the station and disappear from view, I then started the car ready for my 30 minutes drive back home reflecting that although some of the demos didn't work and we never had the time to look at wheels on my setup, or even look how the mmu unit could be removed from a dead 128d (that was soldered on the mother board) and inserted into a working model, on the whole it was successful

Would we follow the promise of a U.k. Group, only time and family commitments would tell, arrived home I emailed all involved thanking them and saying we need to keep momentum and push the new U.k. club into existence.

General shot of Commodore 128d setup



This was a picture after the event I don't drink coke so the cans were left by the members, I need to point this out as a certain person reading will question me about the cans, it's a sort of personal/private joke

Anyone else interested in a U.k. Commodore club and meeting on a regular basis? Why not drop me an email and tell me where in the U.k. you are.