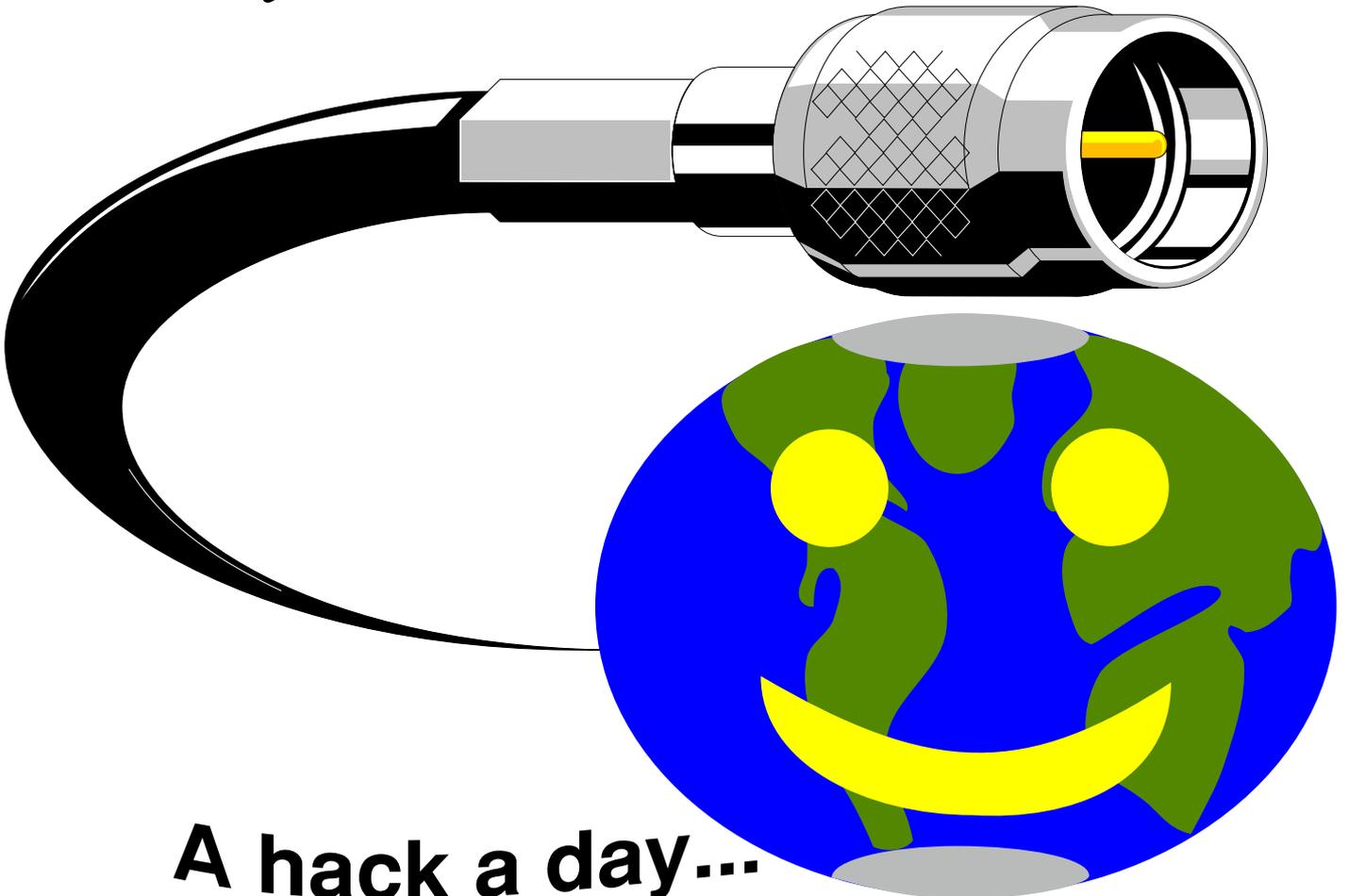


FROBNICATE

After a good LARTing... We're baaaack!

BACK THE PLANE



A hack a day...
...keeps the lusers away!

- What's so great about Acorn?
- iomega zip



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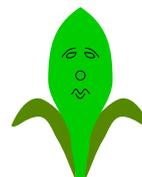
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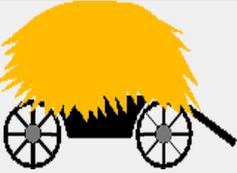
Please do **not** use my private email address for Frobnicate related mail.



Editor's Page

I hope you've noticed the new domain name... In fact, my WWW site has been totally redeveloped.

usual, but the *Hacker* diaries have moved into the Frobnicate area. There is a 'map' page giving old and new URLs, to help you locate what you want.



HeyRick!

<http://www.heyrick.co.uk/>



<div style="border: 1px solid gray; padding: 5px; margin-bottom: 10px; text-align: center;">BudgieSoft</div> <p>Commercial and free software for the Acorn RiscOS platform. <i>(click here for BudgieMgr support)</i></p>	<div style="border: 1px solid gray; padding: 5px; margin-bottom: 10px; text-align: center;">Frobnicate</div> <p>The Acorn-oriented magazine with an anarchic outlook.</p>
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<div style="border: 1px solid gray; padding: 5px; margin-bottom: 10px; text-align: center;">Rick's World</div> <p>My home page.</p>	<div style="border: 1px solid gray; padding: 5px; margin-bottom: 10px; text-align: center;">Linden Garden</div> <p>My mother's home page.</p>
<div style="border: 1px solid gray; padding: 5px; margin-bottom: 10px; text-align: center;">Econet (EEA)</div> <p>Planned to be the <i>ultimate</i> Econet network resource area.</p>	<div style="border: 1px solid gray; padding: 5px; margin-bottom: 10px; text-align: center;">Movies</div> <p>Rick's movie reviews, movie information and so on...</p>
<div style="border: 1px solid gray; padding: 5px; margin-bottom: 10px; text-align: center;">Email Rick</div> <p>Send an email to Richard Murray. <i>(rmurray@heyrick.co.uk)</i></p>	<div style="border: 1px solid gray; padding: 5px; margin-bottom: 10px; text-align: center;">Email Mom</div> <p>Send an email to Rick's mother. <i>(stephanie@heyrick.co.uk)</i></p>

Can't find something?
Click [here](#) for a textual map showing where everything has gone...

Site last updated Sunday, 23rd August 1998

A member of the [Argonet Webring](#)
Back Index Random Next

This site is designed to look best with tables and HTML 3.2 facilities, in a resolution 800 x 600 or better with image downloading enabled. Fallback is provided.

The counter says: 00002248, our audience says PANI C...

Copyright © 1998 Richard Murray

This issue sees the beginning of "The day the earth stood still", a nice B-movie epic about all hell breaking loose with the Y2K 'bug'.

Also included are a few submitted articles - what is so great about Acorn computers, and what one person thinks should be in RiscOS 4, finally an article on networking.

Our alternative 'dictionary' of computing continues. We review the iomega zip drive and ... who could forget the hacker? Will Sopowitz survive this latest power struggle?

I hope you enjoy *Frobnicate*, and remember - WE NEED YOUR ARTICLES!

As you can see, the old links style index has been replaced with a table giving you buttons to click. It will fall-back for browsers that cannot support tables. The *Frobnicate* area is in the same place as

Richard Murray,
23rd August 1998 at 15:53

THE DAY THE EARTH STOOD STILL

As far as days went, it was a wild one. All across the planet, people were gearing up for the biggest and loudest party yet held by mankind.

Of course, they were all a year early for the millennium – but little technicalities such as that never stopped the party spirit. Indeed, it was a good thing. An excuse to have two kick–ass parties.

It was around midday GMT. There was supposed to be a light snow with a possibility of sleet in places. No, wrong. The sun was out, bathing England with a force that felt only slightly more powerful than a lightbulb.

Jennifer was upstairs deciding which dress to wear to the party. It would probably be a “dancing in the streets watching the fireworks” kind of deal, and she was weighing up the best way to reveal as much of herself as possible without freezing her butt off in the cold night air. The students arranging the party had not been very specific about the location, which made it all the harder... heels or flats? What if it rained? Worse, what if a blizzard appeared from nowhere? Still, Jennifer got the impression that there was no official party plan. Come midnight on the 31st of December 1999, the party would begin, everywhere. And come 2nd of January 2000, several thousand people would be unable to remember the previous day.

Jennifer looked at her watch. In some parts of the world, the new millennium was starting.

“Five, four, three, two, one...” she thought “Well, happy twenty first century New Zealand, Australia, wherever”.

Jennifer tried on her black dress again. It was sleeveless and more–or–less skirtless. Maybe too cold for that? It didn’t matter. She was only wasting time waiting for Tiffany to come around. Tiffany knew about those sorts of things, and often dressed in a way that made the guys suddenly turn into drooling maniacs and start ritually showing off and fighting for male dominance.

Jennifer picked up the phone. It was dead. She clicked the disconnect switch a few times and then wobbled the plug in it’s socket. Nothing.

Jennifer walked over to the computer and brought up a connection to the modem. She typed “ATM1H1” and listened to the sound of...nothing. The modem was connected, the speaker was on, but there was no dial tone.

“Damn thing”, Jennifer thought. She slipped on her black court shoes and headed for the front door.

Outside she decided her showy black number was a definite non-starter. The sun was a hazy white blob in the sky and Jennifer’s body temperature was steadily dropping.

Tiffany met Jennifer half way down the drive.

“You aren’t serious?”, Tiffany asked. She was wearing fake fur and insulated boots.

Jennifer shook her head slowly and went into the house. Jennifer rummaged around for the decaffeinated tea whilst Tiffany fiddled with the television.

“Hey, you can only get the local station. The national ones seem to be stuffed... Is your antenna broken or something?”, Tiffany called.

“Uh?”, Jennifer replied.

“Your TV antenna... Is it broken?”

Jennifer walked in with a regular tea for herself and decaf for Tiffany. “Probably. Stupid phones are acting up as well.”

“We interrupt this broadcast for an news report. We have unconfirmed reports that the global telecommunications system is down. At present, the cause is unknown.”

The TV picture changed to a hurriedly designed animation explaining it to the dummies who didn’t understand the long words. The animation played again, this time in slow motion, with the announcer spouting a load of rubbish about why they think the system went down. Apparently a power glitch brought down an exchange in the midlands, which caused other exchanges to fail. The announcer used phrases like “domino effect”.

Jennifer switched off the television and both girls ran upstairs to Jennifer’s bedroom. Time to forget about the phones and pick out something good to wear.

Tiffany explained she was hoping to borrow something from Jennifer, as Jennifer's clothes were good, and Tiffany's were either weird or slutty or both.

*It's Christmas time
There's no need to be afraid
At Christmas time
We let in light and banish pain*

The local independent radio station was playing the Band Aid classic, drumming up support for the less fortunate who won't be having a party this year. It could be worse, it could be one of those annoying Christmas songs that gets airtime from November to January, by which time everybody wants to strangle the artist who is getting plenty of royalties for their song.

Tiffany suggested woolly stockings and a few undershirts to make Jennifer's black dress a bit warmer. Tiffany herself was looking for something black.

The radio station got about three bars into "Sunday Girl" before cutting to a panicked news reporter. "All the computers in the far eastern dateline have gone down. Just died. This chain reaction has knocked out telecommunications globally. The are unconfirmed reports of passenger aircraft crashing into cities, mountains and the oceans. The Internet is suffering heavily with many servers running on PC architecture machines ceasing to operate properly."

"Why pick on PCs? What happens when one of those servers goes down?", Tiffany asked.

"Notice he didn't say it crashed?", Jennifer said, "If the thing died and ceased operating, the Internet should be able to recover – it was designed for nuclear strikes. However what if one server started broadcasting coredumps? That coupled with the telecomms failure would cause chaos."

The reporter came back after a botched attempt to play "Sunday Girl", carrying on from where it left off. "As the dateline crosses into the pacific rim, early indications are that computer systems in Australia are deducting between thirty and a hundred years worth of cumulative tax from people's bank accounts. Hong Kong now owes the Chinese republic a figure so large I'm not even sure how to say it."

"Wow!", said Tiffany, "I guess my student grant will be a few thousand O.D'd!"

Darkness came quickly. Jennifer went out wearing Tiffany's suggestion, and decided she'd start the new Millennium with pneumonia. Tiffany walked down the road alongside her. People were doing one of four things... Either they panicked over not having telephones and mortgages in credit, or they jumped off of bridges because their stock market days looked very bleak, or they laughed about all the morons running inadequate computer systems or they didn't know and didn't care.

The girls headed up to the top of the hill, towards the LASER show. There was a big widescreen projection monitor that some of the students had planned to hook up to something in space... A weather satellite or MIR or something. Only it was showing fuzzy static. Everybody watched transfixed as an image appeared on the monitor. Information on the side proclaimed it as a Russian spy satellite – a remnant of the Cold War, with instructions and access codes leaked into the public domain sometime during the fall of Communism in Russia.

The image overlay, a set of simple lines and co-ordinates, made it easier to identify the location. We were looking East over the Holy land and towards India. Some of the cities were not visible. No lights, nothing. Other cities were very brightly lit. There was darkness as the operators changed lenses and position. We were looking down on a bright city in north Africa, maybe Egypt – but the guidance lines had been turned off.

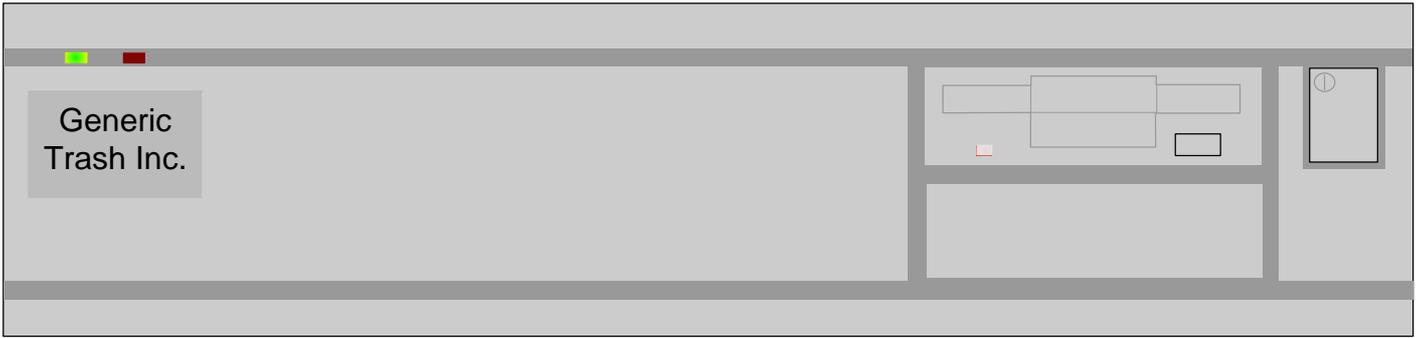
The city shimmered, hazy and brightly lit. Every so often clouds would pass across the city. The camera zoomed in slightly.

"Oh my god", whispered Jennifer.

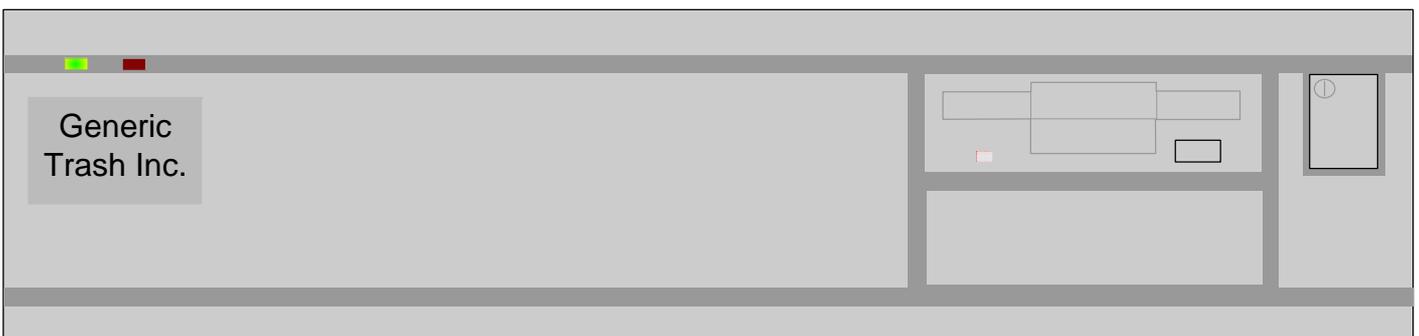
"Is that what I think it is?", Tiffany asked.

Slowly, the partying procession stopped their revelry and stood silently watching the image on the monitor. This unnamed city, quite large and only just filling around half of the screen, was slowly and steadily burning to the ground.

To be continued...



**What do the
really stupid
lusers use to
power their
computers?**

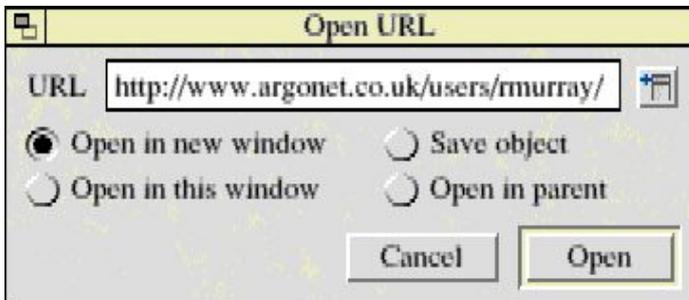


!Browse

Now the !Browse trial period has reached its end, and the Java software has rolled over and died... Only two things remain:

- a. When will it be released, how much will it cost.
- b. How does it look anyway?

In typical Froblicate order, we'll look at those points... starting with question B. :-)



!Browse seems a capable and forgiving browser. It offers tables and frames and plug-in support, among other features.

There are still some things that need to be looked at:

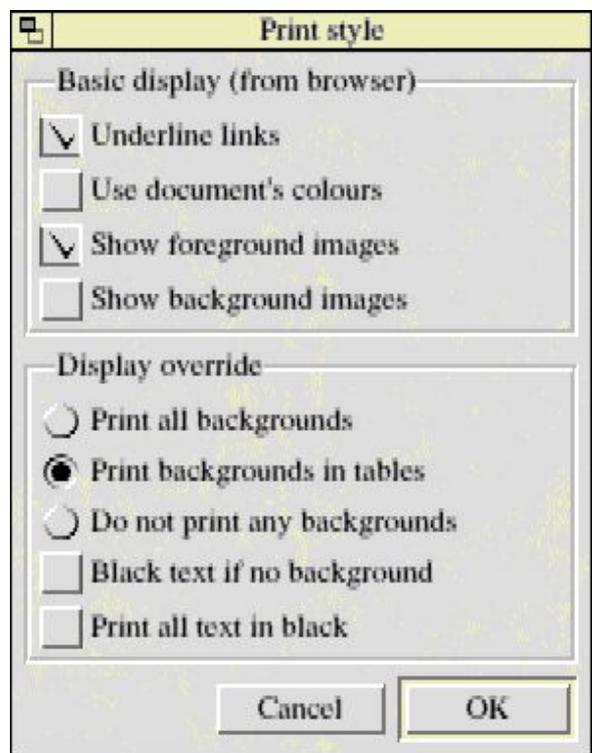
- The cache is provided by an external program that appears (for some – I don't use it myself) to lose stuff.
- Additionally there are some URLs that need to be 'fixed' with a call to the *nscache_flush command (www.yahoo.com) and some that cannot be fixed no matter how many times you try to flush the cache (sign up to www.buffyslayer.com/bronze/chat.html and try to enter the chat room (using plain HTML)).
- It (and the toolbox) eat memory in unbelievable quantities. Using !RAMplify, you might be able to recover half a megabyte on a 4Mb machine – if you swap out everything else. :-)

But don't get me wrong, I like !Browse. It is fast at rendering, it has intelligent printer support and it just looks nice.

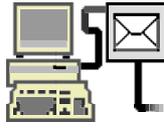
Now for the first question... !Browse is now available, costing around £39.95. The Java plug-in should cost about the same too.

This price drops to around £29.95 for Clan members with the beta CD-ROM.

And as for ArgoNet users, they have received a frame/table compatible version of !Fresco; because it is a lot easier to install than !Browse... a decision that pleased some and infuriated others...



23/02/1998



NetMail

A fully Fidonet compatible network based mailing system.
Exclusively available on the Acorn platform.

Coming soon from Squirrel Solutions

For further info E-Mail info@squirrel-net.demon.co.uk

**The same power source
as the rest of us...**



It will not make you socially graceful, it will not give you good fashion sense...

**IMAGE IS
NOTHING**

***HACKING IS
EVERYTHING***

What's So Great About Acorn Computers?

by Philip Armitage

But there must be something missing?

If you're reading this 'essay', you're probably an avid Acorn user and as such are more than qualified to answer this question yourself. You turn your machine on every day, write letters and email messages, browse the Web and check your favourite news groups, make small adjustments to your company logo, update your accounts and mail them to your accountant, play a quick game of Quake in a quiet moment and write that little application you've been meaning to code up for months.

You could use a PC. You could even use a Mac.

Let's face it, you could use almost any home computer since 1985. But instead, you, and me, use an Acorn RiscOS computer. We must be mad really; I mean it doesn't run Word for a start! Joke...

This is of course but one of the problems us poor RiscOS users face in this Windows world that we live. But hang on a minute, I use my Arc for everything - never downgrading to my PC (except for programming work - as a Software Engineer I have to write Windows applications). So what's the problem then?

Well there is no real problem apart from the minor irritation of having to explain to people that 'computer' doesn't equal 'Windows' and that no, RiscOS doesn't have a 'Start' button or an 'Explorer' or 'Control Panel' or 'Wizards'.

You can do pretty much anything with your Acorn system, coupled of course with the right software and just a little bit of knowledge. You can certainly do anything that a PC user can do, generally far faster and without encountering any 'blue screen' messages.

One interesting point that continually amuses me is that we Acorn users generally love our machines. We must do or we wouldn't stick with them. But PC users hate Windows. They hate how slow it is. They hate how often it locks up. They hate their 300Mb office suites. But they generally know no better (bless 'em). They sit there with their 300MHz bag o'bolts shaking itself apart as the 'Display Properties' dialogue box creates 30 seconds of disc activity and desperately tries to open into the 'cramped' 32Mb memory. Me, I just click on the 'palette' icon, select a screen mode that takes my fancy and instantaneously I'm running that resolution. Of course, I forgot to mention that the PC owner must reboot first. And I'm sure I don't need to tell you how long they'll be waiting for that new screen resolution... that is if their video card supports it.

The fact that I'm driving at is this: considering the size of Acorn and the Acorn market, RiscOS is bloody marvellous!

It's easy to ridicule the PC world for its bloated and unreliable operating systems and applications but it would be foolish to say that the Acorn world were perfect. Many ardent Acorn fans slag the PC off with little actual fact to back up their rantings and in many cases this does more damage than good. For RiscOS is not perfect, the hardware is not perfect and neither for that matter is the application software.

What's missing in RiscOS?

RiscOS is a superb, small footprint, stable and high performance operating system and is probably why you and I choose Acorn over 'Wintel' every time. However, RiscOS is not perfect and it never was. The major problem with RiscOS is that as time goes by, other OSs become more advanced and users want to do more and more with their systems while RiscOS tends to stay still. Well not exactly still but from 1992 to 1998, RiscOS hasn't changed all that much.

In many respects that is a very good thing. In 6 years RiscOS has barely Grown at all but been tweaked, bug fixed and enhanced. In that same period of time, Microsoft Windows has grown from an already large 4 million lines of code to a hard disc busting 28 million. That's a 700% increase in size. I do wonder how many of those extra lines of code are improvements and fixes and how many are new, bug ridden and relatively untested.

I bet it's one of those millions of extra lines of code that are executing the next time your PC crashes!

Microsoft could well argue that in the last 6 years computing has advanced sufficiently to justify all those extra lines of code. Maybe I partially agree but it is certainly true that

- i) Windows is a complex mess and
- ii) RiscOS is desperately lacking some very important features that continually hold it back.

Perhaps a compromise is needed. I for one like the way I can still use an ARM2 machine for top end DTP and am particularly impressed when the latest version of my favourite software has a lower system requirement than the previous one. Those are facts that simply can't be stated for Windows software.

So what exactly is missing from RiscOS? Off the top of my head I'd say Virtual Memory, system wide OLE, out of the box internet connectivity and security. There is probably a whole lot more but I think that's a start. OK we can get around most of these deficiencies with third party applications but

after seven revisions to RiscOS-3, the OS should be taking some of the responsibility. Of course RiscOS-4 is about to hit the streets and this new OS should sort out many problems with the RiscOS kernel and the associated application software. It's a shame it won't hit the world with as high a profile as Windows 95 but in its close circle of Acorn friends, RiscOS-4 is more important than Windows 95 could ever hope to be! But what is it that's great about RiscOS?

Let's start with it's superb interface. As GUIs go I haven't found anything that comes close to the RiscOS desktop for sheer simplicity, organisation and speed. And I don't just mean 'redraw speed', I mean the speed at which you can get things done, real work with a minimum of fuss.

Let's also consider the simplicity and functionality. RiscOS has always had drag and drop as a central issue to its design - long before all of the rest. It has always allowed multiple applications to share screen space and its multitasking - although often criticised against 'modern' systems - always works superbly, with minimum latency between task swaps even on 8Mhz computers. I don't know about you, but when I get a new program, even if I've never seen it before, I seem to know how it'll work just because of the well designed and consistent interface and the way that drag and drop is a system wide feature and not a recent afterthought, a la Windows. I like dragging a text file from a filer window into an editor or a graphic into an Impression frame. I particularly like having a bitmap editor, text editor, vector graphics program, Desktop Publisher and Tracker player running simultaneously in 2Mb and still have enough memory free to actually use the machine at top speed. Windows would be crawling with 32...

Let's look at countless other features like dynamic resource allocation with the formidable Task Manager, the superb built in BASIC, the text editor, drawing and painting applications on a chip under the hood, the font technology that you can read at any point size even on a telly, the first context sensitive pop up menus on any system... the list is near endless.

If the PC ever seemed an attractive option, I hope I'm doing a good job of putting you off.

There's nothing wrong with Acorn hardware!

Or should that be 'There's very little wrong with Acorn hardware'? This is a short section as Acorn hardware stands up very well. This is partly because the software, including the operating system, are so undemanding on performance that our beloved ARM chips are rarely overworked. It is also partly related to the ridiculous performance that all of today's platforms offer as recently hardware specifications have left many spare processor cycles for even bloatware like Windows to have breathing space. From 1982 to 1992 our machines went from 2MHz to 25MHz. From 1992 to 1997 our machines went from 25MHz to 233MHz and the next generation Risc PCs are going to top 400MHz. And most people still spend the vast majority of their time using word processors...

Memory is also in abundance with many Risc PCs happily sporting 32MB or more with multi gigabyte hard drives backing this up: enough to store at least ten copies of every program you'll ever use - 'just in case'. Or perhaps you're one of those Risc PC owners with a 600MB RiscOS partition and a 3GB PC one!

I suppose all we really need is better display hardware with support for accelerated 3D and a means of plugging in cheap PC expansion cards. That would certainly keep me happy for a while and who knows it may be just around the corner with the introduction of Phoebe.

But aren't there gaps in the Acorn software market?

Perhaps 'gaps' isn't the correct word as in general the Acorn software scene has always resembled a tightly stretched film. There aren't really holes but it's a bit thinly spread. Take relational databases for example. Beyond Data Power II we have very little else. On the PC, if you don't fancy Access, Paradox, Fox Pro or D-Base then there are hundreds of other lesser known alternatives all of which have more users than Data Power, our premier database application.

However in some areas it is true to say that there are genuine holes in the market: decent C++ compilers, Java Development Kits, 3D modellers, encyclopædias, intranet software, network security, graphical programming, software engineering, graphical web page designers, presentation graphics, accounting, project management, and document management to name but a few. OK some of these aren't everyday applications but they're the sort of things that attract professional users (yes, that includes millions of Windows users where you can often get this software for free).

But then there are the real RiscOS gems that make other platforms look simply inadequate. Desktop Publishing is one example that springs to mind with the wonderful Impression and Ovation. Music writing is another area where people buy Acorn computers just to run Sibelius. I suppose Ovation and Sibelius are Acorn's 'killer apps' - programs that are good enough to sell the system. But the PC does have all bases pretty much covered and it would, in the current computer climate be difficult to promote our platform on the strength of two, albeit excellent, programs. Furthermore, we've already lost Artworks (one of Acorn's earlier killer apps) to Windows and Sibelius is next to go (the developers are converting it to Windows which one day will surely signal the end of the RiscOS version) so can we rely on such a small app-base to carry our platform forward? Maybe Acorn's networking strength may justify RiscOS' position as excellent thin client software for internet connectivity.

But perhaps we are missing the point by judging software on the PCs merits. If we instead play to the strengths of Acorn RiscOS software and then compare to the equivalent Windows applications we see a very different story. Let's look at the process of typing a simple business letter. On the PC we would use Word for sure and on the Acorn we would use

Ovation Pro. The first obvious strength is that Ovation is around 45MB smaller than Word. Word takes maybe 25 seconds to start up whereas Ovation takes about 3.

Let's look at the size of the files created. The Word document would be say 45KB; the Ovation document on the other hand would be under 1KB. As I said, a very different story.

Take Internet software. On my 486-100MHz, Netscape Communicator takes about a minute to load. On my 12MHz A3010, the ANT Internet Suite loads in about 5 seconds. Admittedly, web browsing in 4MB on RiscOS isn't brilliant but to be honest, web browsing in 16MB on a PC is pretty poor too!

Maybe I oversell the speed issue but I think it's about time that someone did. I mean a word processor with seven hundred features that I never use is one thing but popping up an hour glass when I delete a line of text is another (and all just because at that exact moment Windows has decided to re-seat its fat arse on the hard disc).

This kind of speed and reliability is exactly what PC owners are starting to cry out for. It's just a shame they don't realise there is a system out there that does exactly what they want (and works out of the box unlike Linux).

So why isn't everyone using one then?

There's a number of answers to that one. Acorn is too small for a start. They make headway in the computer market by forging excellent and lucrative deals with big, established companies like Digital and Psion. Acorn's advertising has left a lot to be desired from day one. The reason for this is still unclear but maybe if Acorn placed a few strategic adverts in Computer Shopper, PC Plus and PCW they would stand a better chance. The world is of course against the small computer platform. The Atari ST is dead as is the Amiga despite the still huge user bases out there. Even the Mac is in decline as it loses all of its previous advantages to the all encompassing Windows market. On top of this Acorn has other disadvantages. Firstly it was never as big as any of these 'one make' platforms in the first place and secondly, the computer industry likes to give Acorn a good pasting for some reason.

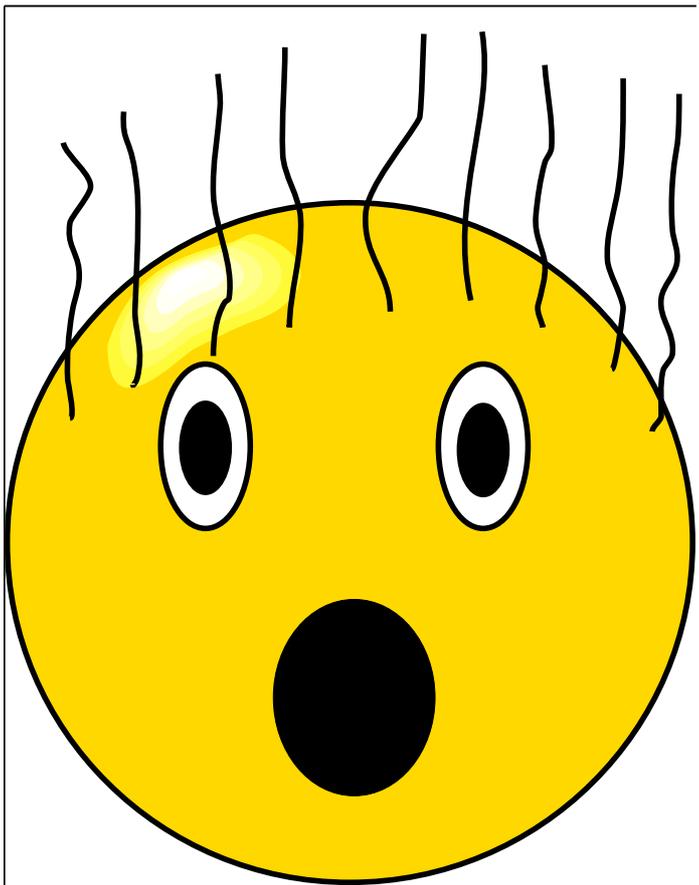
I never have understood this second point much. Just because of Acorn's traditional education background, many companies and magazines love laying into Acorn big style. It's a bit unfair considering there would be a far weaker computer market in the UK without Acorn and it's original commitment to the government's computer literacy campaign. There would be no low power chip for hand-helds like the Psion or mobile phones without Acorn's commitment to ARM Ltd. I doubt that Windows 95 would have that icon bar had they not ripped Acorn's design off so secretly. I bet a lot of today's programmers learnt their trade with a copy of BBC Basic long before Microsoft ever thought about a nice easy programming environment of their own. I could go on....

Whether Acorn will eventually succeed is not really clear at the moment. For as long as I've been using Acorn computers (since my Electron back in 1985), Acorn have been teetering on the edge of collapse but have continually manage to re-invent themselves and produce the best computing devices on the planet. Maybe Phoebe and the various NC's will seal Acorn's eventual future...

One thing I do know is that I'm probably preaching to the converted as if you've got this far through my ramble then I bet your not a Windows user. Or if you are, I bet you use it begrudgingly knowing that you could get things done much easier on your sleek Acorn at home!

Philip Armitage is Software Engineer with a degree in Computer Science. He says he enjoys being an "industry commentator", so maybe we shall be reading more from him soon?

You can email Philip at philip-armitage@rocketmail.com or you can visit his WWW site at:
<http://members.tripod.com/~philarmi/>



Yes, Phoebe2100 really *is* that colour...

YOU GOTTA PROBLEM WITH THAT, HUH?

RiscOS 4 ???

Written before the announcement of the release of RiscOS4, Kato (axe623@novell4.bham.ac.uk) wrote this article on what should be in RiscOS 4.

Please note that this is not the official opinion of Frobnicate. I, for one, absolutely loathe the W95 "save" method... :-)



Designing a new operating system is an expensive and risky (he he :-)) business, which is why we infrequently see it done! Most operating systems are a straightforward progression of versions, each with a few new features, and a few bugs removed...Or else they are good ideas pinched from someone else (not naming any names!).

But this doesn't always answer the question of what the users want...and after some careful research, questioning many (two - one of whom is myself) people, I have come to the conclusions about what would make RiscOS into the perfect operating system, at least to the user; I'm not talking about scalability, I'm talking about usability (and that includes how pretty it is). For the reference of those here wondering where I'm starting from, well, my machine runs RiscOS 3.70 (plus a few little beta extensions, and patches.....), and so that is my base line.

Finally, many people reading this may say - he references Windows95 a lot, and they may say -"but windows is horrible", and I agree, but you have to look past the quality, and look at the ideas behind it understand what I mean when I say "like Windows95"...

Filer Improvements:

This is possibly the shortest of the sections (which is probably bad). When the Arc came out it had a...ignoring Arthur...a fairly advanced desktop filer, but now it is suffering as the legacy code rears it's ugly head in far to many places....

The first changes should be unlimited length file names and unlimited files in a directory. I have used X-Files (but I've lost too much data in crashes) and now RaFS to get round the problems, but I shouldn't need to! With this should be added the ability to read Win95's long file names. Many of my files have exciting names such as "Frogge~1/h" when they reach my machine, either because they were .html or the name was too long; this is a pain, as I often use the internet to do research, and so come back with files where the name was once meaningful...

Similarly, when reading from PC discs, or CD's then the

apparent file types should be ignored and Dos extension mapping should be used - .gif is a gif file, not an &400, or whatever random number it has chosen to use.

The next point is not so obvious initially, but of supreme importance! Background loading, saving, etc. All filer operations should be performed in the background; stopping while copying multiple files to/from floppy or between CD and Harddisc is phenomenally irritating (and DEC's running Unix can manage, so why can't we!)

Just say no!

Sometimes the filer comes up and says do you want to do X, and the options are Yes, No or Yes to all. Even a five year old can see which option is missing - no to all (and no, that's not in windows either!). Another thing missing is the 'you've already got this, do you want to replace it', which is in windows and I like, but even in windows it is missing something - and that is - copy it as something else. Often it says 'do you want to replace readme.txt (18 Jan 97) with readme.txt (24 Sep 86)' and I want to say, no, not replace - but copy as "splurgle.cat", and that isn't an option...

On the theme of keeping up with the Jones'; it would be nice if we could use the "a: drive" or LS120 as it's more properly known (and other similar HHD drives) so that we aren't left behind.

Possibly this is just my machine, but I suspect that there's something a bit bugged in the CDFS routines for mixed audio/data cd's. What make me think that? - just try and copy a file off one. 20 minutes I waited for my 8X cd rom drive to do a 4Mb file, in the end I quit, and copied it via a network link to a PC which managed the same file in ~15sec (and he has a 4X cd rom drive). This is a bit of a bugger, 'cos we now have CD singles with videos on, and we Acorn users can't watch them!

Another important improvement is full keyboard support for things like deleting, renaming etc. Because using the keyboard, and hitting [del] followed by [return] is quicker than following menus.

The Find Files function is a little poor. Under the famed Windows95 OS the find files is rather more useful. For those who haven't seen it, here's a precis of it's features.

Find Files by Type

Find Files by Date of Creation

Lists all the found files at the end

Allows you to copy files from and rename files in the window.

Has a remarkably dull, and irritating animation.

Guess which features I'd like... Windows also has a couple of

other nice features on file actions. Copying gives a (remarkably inaccurate) time remaining figure. This suffers in the same way as the Acorn's bytes remaining - it does it for each individual file, as opposed to the whole copying operation. A better system would be bytes/time remaining for the whole copy operation and bytes/time for the current file.

Selecting files in one window, and then going 'oh bugger, I need a new directory to put them in' is not a problem; windows remembers selections in each window separately - also sometimes I fancy the Windows95 save dialogue box, probably available by dragging the file icon to the file name box, as this allows you to save the file without finding the directory, but with the Windows95 one, it allows you to create a new directory as well as find an existing directory - this can be very useful!

Last few features now...

Inbuilt links - as provided by softlinks, but for files, directories and applications, and a disable-able, configurable recycle bin, that compresses data a lot. Finally on disk matters - Disk salvage utils - we need some. Why? Because occasionally things go wrong, and it would be nice to be able to fix them! (fix_map should be an available command!).

The Command Line:

Well, after that I thought I'd do something that was a little less trying.... Improving the command line! Well, what we really need here is; command line history and completion (see Unix, Dos with doskey etc.) and obviously command line editing. That's all I could think of for this!

Desktop:

Much though I love the RiscOS desktop, and loath and despise Mac's and Windows, there are some (well quite a lot of)(little) problems, that it would be nice if we could have fixed....

Primarily, I think we need an effective way of killing dead tasks, because I often end up performing a reset because the machine has become a mess (in memory terms), and until I got my grubby little hands on removeDA, it would get shut down because some task had died with half of memory in a dynamic area, which made the machine a little less practical to use! Similarly it would be nice if task manager could spot when the filer has died and resurrect it! Having no filer is a bit of a problem, and believe me, I know.

Now next up is the issue of virtual memory. For many years I used school machines with 2Mb of memory, but at home I had a 4Mb A440. I took things in to print and found that the machine hadn't a hope in hell of loading the thing, simply because it didn't have enough memory! Virtual memory would have saved me a lot of time. Also I like putting diagrams (scans of) in my essays at Uni, but unless I use jpegs, the documents grow rather fast - so virtual memory is a must! James would like an IPC language (interprocess communication language), and having heard the joys of this I would agree. A simple example of what this could do would be getting a machine to load some application, draw a line,

type some text, save it, print it and then quit the application. This (I think you'll agree) could be quite handy.

A proper, multitasking, task window should be implemented - allowing graphics calls to work within the window; we certainly have the processing power to manage that on the newer machines..

Again here it a windows thing, but it's one of those things which we can do (in well written software), but this is quicker. Say you have a paragraph of text in Zap that you want to put it in Ovation, well, you select the text, press menu, select 'save selection', save and drag the icon to the Ovation window. I actually prefer the windows method for something like this which is, select the text, press [ctrl]+[c] click on the window where you want to paste it, and press [ctrl]+[v], which is very good for text etc. between apps.

Don't think I don't like drag and drop - being able to stick a picture in ChangeFSI (like a gif), and then saving directly into OvPro is brilliant, but drag and drop is not always the fastest method.

On the appearance of the Desktop, since the new-look / 3D effect came in, with marbled windows and Icon bar I've thought that we were pretty much there; just one tiny thing - 3D menus and icon bars (al la Matthew Bullocks 3D patch). And on shut down please let it ask for confirmation (Windows95 and Prettify on RiscOS).

Finally, in a vague place between this and the next topic - can we have some built in screen-savers, not just a screen blanker (preferably some 3D ones (like the OpenGL ones that come with release 2 of Win95)), because - they allow me to stop working for 10 minutes and watch them when I should be writing an essay!

Application Improvements:

Can we please have a !System that works again.... I'm getting fed up of digging through my directories to stick new versions of modules in!

I think that possibly Edit needs a tad of an update (something more like Zap), without doubt it's better than windows notepad, but still, it's a bit poor! I also think it's time that a basic word processor was included with RiscOS- even a 1WP equivalent (though with changeable fonts), every OS seems to come with one, and it's useful for new users to be able to "get stuck in" straight away. Paint could do with a more complete tool bar (eg. Select colour - because it's bloody silly going through a menu for that!), a resize image and a variety of font styles for the text tool. Finally draw should be updated a touch - with a tool bar, some inbuilt shapes other than rectangle (many sided objects) and it's about time export as sprite (and jpeg) was an option.

Another suggestion is that available as an upgrade to draw could be a system that takes it up to the level of Xara on the PC - which is what I'd like draw to be....

Pinboard. Now, I'll admit that it does what it says it'll do. It is indeed a 'backdrop and icon bar utility', and it's image handling is better than any-other system I've used (Scale, Tile and Centre - windows only gets scale with the Plus pack), but Windows has one HUGE advantage, you can actually drop

files onto the desktop - it's a directory of it's own - as well as having links to files/directories/apps. Thats really useful!

Being a niche platform a file format converter is really useful; and what what we need now is a document converter... You know from Word to OvPro or Impression (directory format) or even Ovation... - and back - so we can communicate with other computers. Similarly (but a bit different), a multiformat video player (QuickTime, Avi, Mpeg and VideoCD). Because so much these days is 'multimedia' - look at the Natalie Imbruglia CD single - with a video (mpeg), and we never see them!

The final thing is that the machine should come with a web browser - it's one of my most used applications - and I'm not even directly connected to the internet!

Odds and sods:

These are the last few things between me and the perfect OS... Drivers; my printer (an HP) doesn't come with or get a driver, the nearest is an HP DJ850, way out of date! I'm not sure they even sell that anymore! With the coming of Phoebe we'll need standard drivers which allow us to use at least the basic functions of any card...

The semi-automatic deletion (it should ask first) of unused modules would be nice - because I'm sure that some of my modules aren't being used and lie there doing sod all because the associated piece of software has bogged off (I've deleted it and not it's associated modules).

Unrealistically I'd like a converter - rather like the one that DEC produced which converts X86 code to run on the Alpha processor - but in this case 1 which converts from both Mac & PC (preferably from any GUI on any processor!) code into ARM/RiscOS code.... Unlikely - but it would be good...

Finally a real (paper) manual. Why? Because I know my computer quite well, and the only time I need the manual is when I've well and truly broken it and I can't get at the on-line manual then!

So that's it then; thats what I'd like in RiscOS 4 - and James might even use it then!

I realise that much of what I want is available as public domain/shareware patches, but the point here is that they shouldn't need to be. For my printer I use a piece of software by Symbiosys, which gives me most of the PC printers functionality - but it is only luck that I found out about it. I did have Windows save dialogues available as I have described - but again it was a patch, and it happened to clash with PD Tracker, and so it had to go, and therein lies the problem with patches, they won't always work with a new piece of software or hardware, and you then loose the functionality. That is why these things should be built in to the OS - giving some other operating systems a really good run for their money...

by Kato (axe623@novell4.bham.ac.uk)

This article has prompted the editor to respond...

Firstly, I can see how it could be useful to pinch some of the better features of other OSs to make ours better, but...

The W95 filer is a bodge. Why can you make directories, rename files and such in the "save" window? It is because the entire save method (derived from W3.1) is an awful mess. Under RiscOS, if you think "I need a new directory", you go create one and open it. Yes, your "save" window will vanish, but the isn't much of a problem as you don't need to wander all around a disc tree when you re-open it. Drag'n'drop, simple.

Unlimited length filenames and unlimited files in a directory are both useful features. However I'd like to point out that the W95 method of creating long filenames is again a bodge - as anybody who has looked at their files in DOS will attest.

The reason names are "FROGGE~1.HTM" is because DOSFS (or whatever) is reading the DOS name. It isn't capable of reading the "long name". I believe WSS make a product called W95FS to get around this problem.

Filetypes on CDs. A well known problem, use CDFSFix to make the "DOSMap" command work, and translate ".GIF" to &695 (etc).

Background loading/saving is better on the Acorn than the PC. Our FilerAction will copy/delete/move many files, and the filer is still usable. Under W95, if you get the explorer to do something, it is locked until the operation is complete. You CAN load another explorer (which is another example of how much of a bodge W95 is - if two explorers work, why not one multitasking explorer?), but it seems to get a little unstable in my experience. You CANNOT compare an Acorn or even W95 against a DEC running Unix. Those machines can to base-level data streaming between devices. Acorn machines do such streaming for network access, but little else. For PCs, it depends upon the hardware and software - don't hold out much hope for W95 using a £12.50 IDE multi I/O card!

Filer option "No to all", just close the window!

I don't follow the bit about using "a:" drive. RiscOS is very good in its drive addressing. It is more complex, sure, but using "net::System.\$UserList" and "idefs::CP3204F.\$!Splat" from any file-related command is much more flexible than...

```
G: (which one was G drive again?)
CD SPLAT
SPLAT
```

The DOS filing system is a continuation of bodesges upon other bodesges. A standard DOS formatted disc gives you 1.44Mb, meaning over quarter of the disc capacity is used to set up the structure. It is easily possible to "fix" broken DOS format directories because - complexity wise - it is approximately as advanced as the ADFS L format. E format discs are much harder to repair, for reasons that the PRMs discuss in length...

CDFS works. Sort of. That's all I'm saying on it. :-)

Although, 20 minutes for a 4Mb file is extremely poor and points to a configuration problem or unsupported hardware. PCs still have problems dealing with MPEG CD singles - so don't feel like CDFS is too terrible. :-)

Keyboard support. Along with cursor-mouse control, they are two things the OS desperately need.

Kato missed one of the most important features of the W95 "Find files" function. It is buried quite deeply, and is basically the ability to "Find files containing...". Therefore if you have a document addressed to "Sue, Grabbit and Run Solicitors", but you can't remember the name or extension, you can look for that text within the files searched!

I agree that the "bytes remaining for whole copy" is a good idea. But don't bother with the time remaining. As said, W95 is exceptional in its inaccuracy. You know what to expect with your system so the "bytes left" has meaning.

Dead tasks requiring resets... The legacy of the RMA which, I'm sure, was a good idea in the Arthur OS. But was tragically misused with RiscOS3 onwards. Virtual memory is something that should be available as an option, but this would require a LOT of code fiddling to produce, so the machines that need it most (pre-RiscPC) are the least likely to get it!

And with that, I must stop... having run out of space!



Acorns and PC's file sharing, and chatting. How is this possible?...all through networking.

This is about the construction and maintenance of an *Ethernet* (not Econet) network between two flats. For those of you who have not encountered such a thing (where have you been, Mars?), this is the kind of network commonly used in universities, businesses, really anywhere a serious and fast network between different types of machine is required.

The kind of network being setup here is a 10base2 network also called a 'peer to peer' (or cheap) - network featuring the following (rather eclectic) mix of machines:

- 1) RiscPC - SA200, RiscOS 3.7, with bits of the beta bits, 486DX4 Card and Win95 (OSR2).
- 2) PC's running Windows95 (all OSR2) ranging from a (Cyrix) P120+ to a P200MMX
- 3) A PC running Windows for Workgroups 3.11 (486DX3).

So then what does it involve?

First is getting a network card of some description...For PC owners this is not a problem - a nice little outlay of £15 will get them a cheapey ISA card which is suitable for most uses. For Acorn owners the situation is a little more bleak...the cards are available but cost more in the region of £100 new (mine was about £30 second hand).

Again, on the software front Acorn users must look out for bargains; I used DeltaNET as my server (it's shareware), Arcweb and FreeNet with TCP/IP as the clients - the results can be seen later.

The next requirement is cable - ours was £21 for 100m (from Eclipse computers - a PC supplier) and it was appallingly made (you get what you pay for!) The connectors fell off, the edge of the spool it arrived on fell off and the cable arrived in knots [but there was a lot of it]. Adding insult to (several) injury(/ies), the cable stretched once it was up!

Extra connectors were purchased from various places (around £1 each) - for 10base2 they are BNC type and for such as small network impedance is unimportant (50 Ohms is the recommended value). The next items on the list were t-pieces and terminators. Both again costing around £1 each. Most cards come with t-pieces, but terminators are not always included. These are essential....as the instructions say "Don't stop there - you mustn't leave any ends of the T open"...

The cable was hidden under carpets and taped to walls with masking tape - and in some cases the doors were gently planed a little bit....

Finally the computers were connected together and we were off...?

Well, no. The card I had purchased actually required a new ROM (not the upgrade disc supplied), so instead I bought a new one (being unsure of the card I had)! This time I went for the RiscPC only card from Acorn.

Having installed it - the next step was to check that all was well with my card. Using the (*one and only*) documented command - *ehstest* I obtained the following exciting message.

```
DCI Version      4
Card Info:-      i-cubed ltd, EtherLan 600 Ethernet interface
                  Unit 0, slot 8, 16-bit driver.
                  Ethernet address=00:c0:32:00:8b:d4
                  10Base2 (coax) interface in use.

I/O Stats:-      Rxframes=1, Rxerrs=0, Txframes=1, Txerrs=0, DMAframes=0
                  Collisions=0, Rejects=5

Frame Info:-      Type=8035 FrmLvl=1 AddrLvl=2 ErrLvl=0 Handler=3a4d3ac
                  Type= 806 FrmLvl=1 AddrLvl=2 ErrLvl=0 Handler=3a4d3ac
                  Type= 800 FrmLvl=1 AddrLvl=2 ErrLvl=0 Handler=3a4d3ac

Controller Mode:- Multicast, reject frames with errors
```

From this we decided that we really didn't know that much about ethernet. But the all important information is there: 10base2 (coax) interface in use. Having set the IP address up, James' PC was used to ping my machine.

Using TCPIP (from the hensa archive) I managed to ping his machine...:

```
ADFS::Amnesia.$temp.the.tip.downloads.smb2 ->ping 192.168.0.4
PING 192.168.0.4 (192.168.0.4): 56 data bytes
64 bytes from 192.168.0.4: icmp_seq=0 ttl=32 time=30 ms
.....
64 bytes from 192.168.0.4: icmp_seq=6 ttl=32 time=0 ms

--- 192.168.0.4 ping statistics ---
7 packets transmitted, 7 packets received, 0% packet loss
round-trip min/avg/max=0.000/4.285/30.000 ms
```

As you can see, we could ping each other. (You have no idea how much excitement that incident caused).

After this we used SMBClient, which allows some access to PC's running Microsoft Networking, but due to a minor error on our part (it was using all the protocols available to try to talk to my machine), it seemed far to slow for normal use. So our next attempt was to set up TCP/IP properly. This proved to be the most useful, especially since it gave all the Win95 machines and me a reasonable amount of access to each other.

This was where I met DeltaNET, which at first go seemed to be an absolute pig to set up, and ever since getting it I have never forgiven it the fact that you can't (as far as I can tell) set the HTML directories to be above it in the directory structure. This is a phenomenal arse as my harddisc is now smothered with soft-links to files...some of them directories with over 100 files in. It does however seem to be quite fast - and if I ever decided to continue past that month then I'll register it...

For the purpose of our network we set up web pages (not difficult for either James or I as we already run our own sites), which consist of the shared files. James eventually gave up producing web pages in favour of the FTP approach - which under windows is a simple case of point and click to set as an FTP directory. Again, DeltaNET will not let the FTP directory be higher than it's self, and so that was not really an easy option, at least initially. Currently HTTP is used to give directory browsing on the PC, and FTP is used for speed!

The web pages are accessed via a web browser (arcweb, browse, a decent version of webster!), which allows you to view them exactly like web sites - shown is a shot from Realm_of_Souls (James's PC). To make life a little easier you can edit the hosts list which translates the dot form of the machines address - to the nice cuddly word form (eg. 192.168.0.4 becomes to Realm_of_Souls or ros). This allows somewhat easier access to the machines.

Surprisingly this method gave a fair degree of success, producing a surprisingly quick and integrated network; simply following the instructions inside DeltaNET provided us with a working system - although however many times I try I can't suss out setting up user names for ftp. People just can't log in as anything but anonymous. The addition of FTP Explorer to the PC's helped significantly though (since you can set that up to log on automatically).

The Final topic here is inter-machine chat. Now I realise that this is *rather* sad - but we did work on getting Chat to work. Windows users again are supplied with all the necessaries (Microsoft Chat), we on the other hand are again a little under equipped as standard.

So we tried IRC....and failed! But with a little help from a cool and groovy Justin Fletcher we had a working (if a little dodgy) IRC Server (and it's free). Many many commands don't work, and using the Nick command resulted in Chaos and eventually a big splutch type crash event.... Despite that it does have some useful effects - Biologists and Biochemists read on...

```

*** CTCP USERINFO reply received from Vlad (Paul Wright (1@2) Idle 344 seconds)
*** CTCP USERINFO received from Amnesia
*** CTCP USERINFO reply received from Amnesia (Kato(Prince of Insufficient Light))
<Amnesia> You know the Agrobacterium we were talking about earlier
<Vlad> yes
<Amnesia> It's looked at as the plasmid trying to replicate
<Amnesia> not the bacteria it's self
<Amnesia> I'd forgotten that.
<Amnesia> (selfish gene stuff eh...)
<Vlad> YES but the
<Amnesia> but the...??
<Vlad> gene causes the plant to excrete proteins which the bacterium can use and helps the plasmid too.
<Amnesia> indeed, which does help the bacteria, but..
<Amnesia> the plasmid contains a gene to transfer itself in the presence of the opines it makes the plant produce.
<Vlad> So?
<Amnesia> The Ti plasmid is attempting to ensure it's survival (according to Dr Newbury). Although as you say, it does help the bacterium as well...
<Vlad> Yes the problem can be thought of as a
<Vlad> group selectionist argument
<Amnesia> err?
<Vlad> I'll come and explain....
    
```

The result of (as you can see) a serious conversation during revision. As you can tell we only ever use the network for work, never ever do we take the free version of Quake and use TCP/IP to (for example) kill each other lots and lots - because that would just be a waste of time.

The network is currently a success (as far as we are concerned), and depending on how useful it proves to be over the next month a decision on DeltaNET will be made, but until then the Network will provide a useful distraction from work.

Anyway, back to killing Nightmare, he really shouldn't have slapped me with a kipper in IRC.....

by Kato



Spam weirdness

Sometimes on American TV programmes you see a stereotypical figure who wears Army clothes, carries half a dozen guns and believes anybody who doesn't is probably a Commie...

The following is a little bit of a spam (for a bulk email product) that is probably targeted towards those sorts of people:

Prices are skyrocketing as Non Democratic forces and Mail Censors take Control of the internet, deciding Who gets to advertise and to Whom ! Look for those little aol notices when You try to access certain mail, You can't ! They have already looked at Your mail and decided You CAN'T have it, period ! But be aware, a little knowledge makes You dangerous, So let Your Congressional Representative know that You are getting Wise to what's going on with the big three power play. More info maybe available in later dispatchs. (If the empire doesn't strike first) But if You still wish to advertise that product or service, better do it now, establish Yourself ! While You still have that freedom to do so.

A few rather important point that these morons are missing are:

- In many parts of America, off-peak local calls to an ISP are unbilled. This is not so in other countries. I bet many of these vendors would change their minds if they were liable for the cost of downloading their rubbish.
- Junk email is ***NOT*** the same as junk mail. When's the last time you *had* to pay to receive a freebie AOL CD-ROM or a few reams of prize draw information from Reader's Digest? Just because they don't pay to send it, does not automatically mean that you don't pay to receive it. There *is* life beyond America, amazingly enough...
- I record and remember every company that spams me. I would not touch their products with the broken end of a rotting bargepole.
- It may not be quite legal, but it isn't an altogether bad idea to send unpleasant packages to their mailing address... If you choose to send something gross like dog crap - ensure it is WELL wrapped so it doesn't end up all over some poor mail guy.
Of course - you *will* remember to omit (or falsify) the "reply to" information. :-)

Crazy spams I've received or seen:

- Many about "bulk mailers", long, dribbling and a waste of space.
- Chain e-letters; I send the five (or ten) replies directly back to the originator.
- The industrial world will crash on 01/01/2000 so you'd better stockpile food, supplies and ammo NOW!
- Make Money Fast, blah blah blah.
- I know where you live. Call me or I'll kill your kids.

The last one is interesting as it moves from a spam to a personal threat - which is hence illegal.

Question is though, what can you *do* about a spam?

Some ideas that may help:

My advice is NOTHING.

Sure, you can use software to pick out the likely sender so that you can forward the message to `abuse@domain_name.com` ; however what happens if that ISP is spam friendly? They are starting to get few and far between, but who knows - the next spam *could* have **your** email address as the sender. I don't mean to be overly sensationalist, but it has happened before. Whilst you may have the trust of your on-line friends and possibly your ISP (if you get to know them), there will be several million people reading that spam; a few hundred of which would take great happiness in picturing you dead.

The best approach you can take is to do what you can to prevent your proper email address getting onto their lists.

First, you need some software to process your outgoing news articles and alter your email address where it occurs. You will need to alter the "From:" line, the "Reply-To:" line (if you have one) and also the "Message-ID:" line.

Next, you may need to change your mailbox identity (in the "Path:" line) to reflect the changes in your email address.

Do NOT use an easy-to-decode address. Things such as `rmurray@argonet.no.spam.co.uk` will fail because a decent email harvester program will spot the "*no.spam*." and remove it, leaving you with a valid email address.

Do NOT then go and place the email address in your signature. You should write something to tell people how to contact you, such as *remove whatever to email me*. It is not good to include your address separated by spaces like:

`rmurray @ argonet . co . uk`

as harvesters are getting wise to this trick.

Extend your domain:

`rmurray@argonet.mackpuddle.co.uk`

It looks valid, but does not exist.

Double your name:

`rmurray.rmurray@argonet.co.uk`

Removes the need to have "remove" instructions in the signature - harvesters may be able to parse simple details.

You could have something a little more cryptic like "Call me once to email me".

Get a domain name with "no spam" in it:

`rmurray@argonet.no.spam.co.uk`

And the harvester removes the "no spam" part - leaving it with an invalid address!

Something to remember is that these measures should be applied immediately as you start sending email, and kept up from then on. If you are already getting spam, you may not see any drop in your spam for a while. Once you are on a CD-ROM, you will always be on it. At least if you fudge your address, your incorrect address may well be on the next CD-ROM...

NEVER EVER submit a request to be removed from a list. Almost all spams have instructions for removing yourself from these lists. There is also a domain that keeps a central list of addresses to be 'removed'.

What is really happening is the remove information is used to check if your account is still 'live', so the software knows if it can send you even more spam.

Several software solutions exist to partially or wholly alter emails, which should be available from a convenient ftp site.

A general news address mangler is *!UnSpam* by Quintin Parker.

A fully featured program for Argonet users is written by Richard Murray and available from his web site - called *!NewsFudge*.

Dictionary of Computing - B

Backdrop

Mmmm, yes. Samantha Mathis, Angela Chase, Ally McBeal or the entire female cast of Buffy...

Yes guys, the backdrop is where you put up a boring picture of a marbled rock, or a picture of the certain special somebody that you wouldn't mind have sick fantasies of (they, on the other hand, may object greatly).

An empty backdrop is the sign of an empty mind.

Bandwidth

The amount of data that can be shoved between two places in a certain time frame. A V.34 modem with V.42*bis* typically connects at 28800bps, but can pass data at up to 56000bps (actually, it can do up to 100kbps but not very often in the real world).

BASIC

Rocks.
BASIC, standing for "Beginner's All-purpose Symbolic Instruction Code" is a waste of time on most machines (consider QBASIC supplied with MS-DOS 5 and 6) and consequently has gained itself a bad reputation. BBC BASIC, however, was quite powerful on the BBC micro. Even more powerful on the Master/Electron and massively powerful under RiscOS. Because of this power, quite a number of fully-blown multitasking programs are coded in BASIC.

BBC micro

The computer that made Acorn popular in schools and homes around the country. No small computer has ever matched the I/O options built into this machine.

BCD

Binary-coded decimal, a headache for 6502 programmers.

Benchmark

The clever way of designing a program to do certain specific things across certain specific processors in order to tell which is the faster. Works in theory, but certain operating systems cost a hell of a lot in terms of processor power. A Pentium kicks ass over an Acorn processor. Load up Windows and you'll have a different opinion...

Beta

That stage in the development of a program when it is considered "okay" to release it to the paying public, but the programmers still aren't quite sure it works properly. A certain company in the north west of the United States are market leaders in the concept of flogging beta versions of software (only they don't call it a beta).

Bill Gates (a.k.a. the Antichrist)

The man responsible for cheap harddiscs and RAM at £1/Mb. Also responsible for the stagnation of the computer industry. As he is an American, typically American ideals are applied - namely "If it doesn't work, throw more power at it", hence yesterdays 486's and P75's are overshadowed by P433MMX's.

Bits

What is left after Peter Bondar was let loose on a PC...
(see *Bondar, Peter*)

Blank

The typical expression of a Windows user.

BOFH

The "Bastard Operator From Hell". This guy should be feared and worshipped. Forget your parents. Forget God. The BOFH knows your have an account, and that's a lot more than he should know. Go and hide, like, forever.
<http://www.iinet.net.au/~bofh/>

Bondar, Peter

The Ex-CEO of Acorn, possibly most famous for doing justice to a PC...with an axe!

Boolean

The way life *should* be. Everything expressed in TRUE or FALSE, YES or No. No grey areas, no pocket fluff.

Bound

Involves masking tape, handcuffs and Bill Gates. Apparently, some hackers and hackerettes get up to this sort of stuff in bed (without BG, thankfully).

Branch

The thing that leaves hang off. Also to redirect in a program ('just branch off and print this stuff on the screen').

Breakdown

A clinical condition affecting WORD 97 users.

Breakpoint

The amount of crap a WORD 97 user can put up with before their head explodes like something out of "Scanners". Also a position in a debugger where execution is halted so you can fiddle around with the code in a semi-working state.

Breakthrough

The day you swap "dir" and "cd" for "." and "dir".

Brockets

The slang term for < angled brackets >.

Browser

The generic term for a program that understands the HTTP protocols, and what this HTML nonsense is all about. As is typical with Americans and PCs, they wanted to come up with an idea of their own (HTML came from CERN) so they gave the world frames and JavaScript. There are actually standards for HTML devised by the W.W.W.C. (often shortened to W3C); but NetScape and Microsoft have

blatantly ignored those standards for so long, nobody is quite sure what the official specification is (HTML 4 in case you were wondering) and web sites are specified according to allegiance. Either it works with Netscape Navigator or it works with MSIE. Unfortunately, in the case of JavaScript, all browsers are different - even different releases of the *same* browser!

If you've ever seen MSIE4 or Windows98, this is Bill Gates' vision for the future. Turn the *entire* desktop into a gigantic browser. This man must have shares in telecommunications.

Buffy

What I'm doing probably between 20:00 and 21:00 on a Saturday night. In case you didn't know - she's a vampire slayer. Nothing out of the ordinary, really...

Bummer

One of the more socially acceptable things to say when your program crashes in such a way as to cause smoke and sparks to emerge from the rear of your machine.

Bus

Part of England's way-underspecified public travel system. The EC plan to outlaw four-star which will make many of the older cars useless. It isn't as if we can turn to public transport... Also, it is the techie-term for a bunch of data lines side by side. You have a SCSI bus, an expansion bus, PCI bus, IDE bus... But for some reason you don't have a parallel printer bus...?

Busy

When the hourglass appears.

By-product

The landfill tips are filling up with obsolete PCs...

Byte

Eight bits of Peter Bondar's dead PC laid side by side to represent a value between 0 and 255.

iomega



zip

The iomega zip drive is an unusual-looking blue contraption that uses chunky discs that resemble something from a low-budget Star Wars clone.

The drive, a parallel port version, was bought for £144 - a package comprising of a zip drive, a parallel cable, six spare discs (retail approx. £10 each) and a bundled zoom'n'scroll mouse (valued at approx. £20). The mouse will be plugged into the PC. The zip drive spends most of its time attached to my A5000.

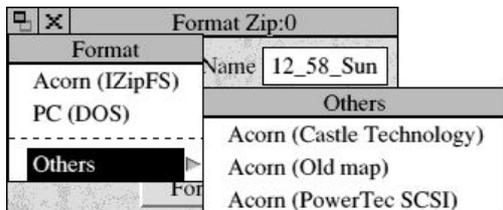
But firstly, I needed something to drive the unit under RiscOS. I contacted my friendly ISP (Argo Interactive) and obtained their !Zip.

So I had the software and I had the hardware. I was ready to roll...

Hooking the thing up is dead-easy. I didn't need the user guide. I loaded the !Zip application. After a few seconds the icon (shown to the right) appeared and said "No disc". I inserted a PC formatted disc. After a few seconds, the disc name changed to "ZIP-100" and I was ready to roll.



The zip drive makes a most peculiar noise. It is reminiscent of the noises that used to emit from the BBC micro's speakers when the processor was doing something intensive.



The !Zip software can provide various formats, their Acorn version, PC formats and formats for other Acorn software.

The main reasons for buying a Zip drive were:

1. Files for the PC are often getting larger than 1.44Mb. If I download from the Acorn, it used to be a hassle to transfer it.
2. It's a relatively cheap way to add 100Mb. Of course, the drive isn't suitable for heavily intensive tasks like debatching news - but it is ideal for placing stuff you won't be using too much. And is it too much to pay for having backups?



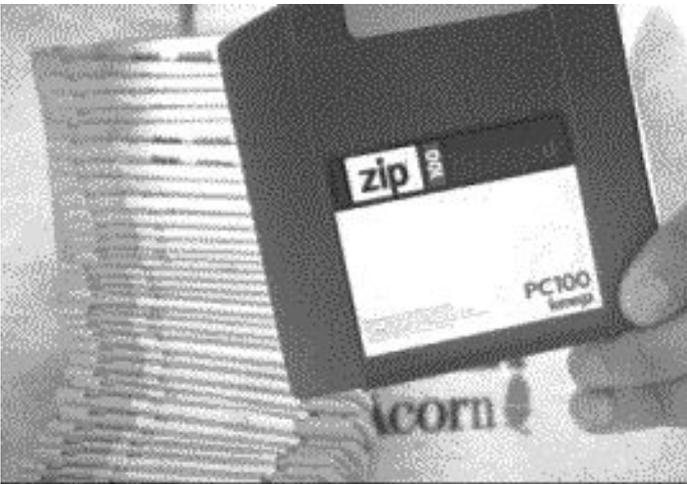
In use, the zip drive is reliable. It is slow, managing a lame 80K/sec on my A5000. However the PC moved considerably faster, an estimate of 300Kb/sec. I expect a RiscPC or anything with a reasonable parallel port would get the best benefit from the device. But being used to Econet, 80K/sec is considered fast! :-)

The officially quoted speed is 20Mb/min, which is roughly 350K/sec.

The most shocking thing was the disc ejection. When the disc is dismounted or when the computer is shut down, data is flushed to the disc and the disc is ejected. It is, um, violent. A mechanical clank and the disc pops out, the entire drive jumping several inches off the table (well, a *slight* exaggeration).

It is important to dismount properly. I learnt this lesson the hard way.

One of the best things about the Zip software is that you can swap discs on the fly. This means that whilst you can only have one 100Mb disc in use at once, your available storage could be gigabytes - as many as you have discs.



Zip discs are a heck of a lot more useful in today's environment... Even for non-critical applications such as copying Quake files around. Or how about a call-out computer support contract? Wouldn't it be so nice if you could take your work, or their system settings, and dump them onto a floppy for safe keeping? Well now you can.

Zip drives available from retailers such as PC World. Alternatively you could purchase a drive and driver pack from an Acorn company such as Argo Interactive - see Acorn User magazine for details.

You WILL need an Acorn driver. The ones supplied with the drive are only suitable for DOS and Windows. Baaaaa! Baaaaa! Baaaaa!

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Drawfiles are recommended.

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ASCII, 1stWord+, Ovation, Impression, Techwriter, MS-WORD, WRITE (or NOTEPAD), RTF.

If you are unsure, export your file in ASCII text format.

Then send the finished advert to
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(maximum 15K unless arranged)

Your advertisement will appear in the next available slot.

FREE.

Adverts A5 (half page) or A4 (full page) - please email with details.

Diary of a hacker

Sopowitz is getting on my case. I thought the jerk learned when I fired him and nuked his pension and trashed his bank account.

But, I guess some people are born stupid.

I'm standing outside the office. Sopowitz just gave me the fire and brimstone act over rigging the P.A. system to play a very rude song at lunchtime. I am fuming. Normally I'd be mildly annoyed, but as it happens I was not responsible for this act against the establishment. Sopowitz and several faculty members decided that I was the most likely candidate. And after a bout of "Chinese Whispers", my being the likely candidate turned into my being responsible. Of course, Sopowitz wasn't amused when I asked for substantiating evidence - as he had none. But that didn't matter, he was on a crusade and he hates me, so why worry about a little matter of whether or not I'm guilty?

So there I am standing outside his office. My mind is trying to remember where the brake lines on his car are. In a little while, I'll have calmed down to plotting ways to mess up his life rather than offing him. Death is too simple. I want him to suffer for this.

Sitting at home, I am playing Quake on my RiscPC. And an idea hits me. You know when this happens in cartoons, there is a kind of 'bing!' and a lightbulb appears? Well, it was almost the same now. So simple, I don't know why I didn't use the opportunity earlier.

Two hours later I am in the college reception. In front of me are a pile of video cassettes. Each one is dated, and each one carries 24 hours of frame-freeze recording. I slip eight videos into my backpack, and replace them with eight E-30 videos. After setting the burglar alarm to set itself off in five minutes, I pay a visit to the canteen. It is fairly simple to break

into the vending machine. I'm not interested in the money. But there are some things you cannot hack. And that is a 'Crunchie', right here, right now.

However it is too good an opportunity to miss, so I fill the remaining space in my backpack with all the chocolate bars I can manage. Then, just to be annoying, I break open the drink vending machine and swap the soup with the coffee.

I drop my backpack on the floor and run as fast as possible to the reception. I barely have enough time to reset the alarm trigger, but somehow I make it.

I arrive late the next day. Looking suitably smashed, everybody thinks I slept in. My hair is ruffled and my clothes are unkempt. Just the look I was aiming for. Because, well, I waded through three days of recordings until I found what I needed.

Sopowitz was hiding in his office. The blonde receptionist was running around, ripping down posters from the notice-boards. It was a shame really, I spent ages getting the photoreal colour matching correct. After all, if I'm to print out a selection of images of hanky-panky in the principal's office, I must make it look good.

I can't wait for lunchtime. There is a massive picture of the very best image possible wrapped up in the projection screen. The screen is set to unfurl on a timer.

I walk to maths. For the first time in my life, I walk to a maths lesson with a smile on my face.

What happened?
Find out in the next issue!

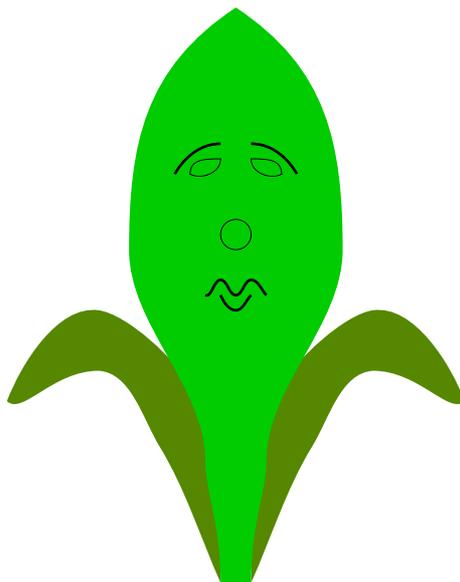
NEW ADDRESSES

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Frobnicate is a Hissing Spinach production