Californian dreaming

Linspire's Michael Robertson has a vision of an open source future. But is he in it for the money, the love of Linux – or just to madden his old foe Microsoft?

Since selling MP3.com for $350 million in 2001, Michael Robertson has used his fortune to become something of a professional thorn in Microsoft's side, whether it's provoking Redmond into a law suit by naming his new open-source distribution Lindows, or donating a bounty for hackers to get Linux running on the Xbox. His latest battle is his toughest yet. Exploiting the resources of the Linux community, Robertson intends to wrest a 5–10% share of the PC desktop market from Windows for his distro (since renamed Linspire) within the next few years. When the Linspire CEO visited *LXF* Towers from his San Diego HQ to introduce version 5.0, **Graham Morrison** asked him how he plans to make that dream reality.

Linux Format: **What do you think are the most significant new features of Linspire 5.0?**
Michael Robertson: We worked really hard on the spit and polish. Linspire is a combination of KDE apps, Gnome apps, *Mozilla* apps... so making them all work well and look seamless took some real effort. You can't point to one particular feature, but if someone uses it and they can't tell the difference between a Gnome app, KDE and *Mozilla*, then we've accomplished what we want.

The feature that I appreciate most is that we've revamped the Wi-Fi control panel. Since I do a lot of travelling, I'm always jumping around different access points – and that was something that historically was almost impossible with Linux. We made it one-click easy. There are a lot of control panel-type things that we invested in. We've everything from audio tutorials to a well thought-out control panel system, and I would stress that CNR [Click-N-Run, Linspire's online software warehouse] continues to get better.

LXF: **Would you say that CNR was Linspire's main selling point over other distributions?**
MR: It's a huge differentiator. It's this notion of being able to do one click

Microsoft, right from their very first computer. So I think you have to be conscious of that. We're not exactly like Microsoft, but we are trying to be familiar, so you won't get lost. [Migrating to Linspire] will be a relatively easy transition.

LXF: How do you go about integrating Gnome and KDE to make a more cohesive environment?
MR: Basically by creating similar themes and making sure that the buttons operate as closely as possible in terms of functionality. A lot of it is creating graphical themes, and combining the functionality.

LXF: Can you see yourselves going down the same route as Novell with its _OpenOffice.org_ KDE integration?
MR: _OpenOffice.org_ is an area where we didn't spend a lot of time, and we need to. Because it's the one thing that looks a little bit different from everything else on Linspire, I think we need to do a better job. But you see KDE and _Mozilla_ sort of get together as well, you see some combined efforts there that I think will move forward. It is frustrating for a user to see 12 different Open/Save dialog boxes. They do File > Open in _Mozilla_ and it's totally different to File > Open in _OpenOffice.org_, which looks totally different to a KDE app, or a Gnome app. That has to be reconciled, and there's still work to be done there.

LXF: Could you work with Novell to bring integration a little closer?
MR: Oh sure. Every Linux company is our cousin. This is not a competition between Linspire and Novell. This is a competition between Linspire and Microsoft. So, if we can work with Mandriva or Novell, we're happy to do that – anything that moves Linux forward. This is such a huge task that one company alone can't do it. People say: "Don't you want to beat Red Hat?"

No, I need Red Hat, I need Novell, I need Mandriva out there educating the world and writing code and winning contracts and things like that.

LXF: You mean Linspire doesn't compete with other distributions?
MR: Novell has a desktop product. Mandriva has a desktop product. So we do have similar products. However, it's all about taking market share from Microsoft. That's the way any of us will succeed. It's not taking market share from each other; collectively none of us have big numbers. I get frustrated when people compare Linuxes. I don't want to be compared with another Linux, I want to be compared with XP. That's the benchmark. Am I better or worse than XP, that's the only thing that really matters, I think, to consumers, not am I better or worse than Mandriva.

LXF: Are you trying to compete with XP by having a lower OEM price for an operating system, or having a better operating system?
MR: We try to do both. The reality is that Microsoft has got a 20-year head start. So, first you have to catch up to Microsoft. I think we've done that. Now it's about being better. Linspire has CNR, is one-click easy and doesn't have to deal with virus and security issues, so I think in a lot of ways we are better.

But we'll continue to take advantage of the product life-cycle that Microsoft is in now, which means there are five or six years, or longer, between product releases. We've just

and get any of 2,000 software programs on your computer. One click, and update all of the software programs. Or one click to install a brand-new PC with 50 custom applications that you've selected. That's pretty damn unique. It's how computers should work, in my opinion, and it's also how we make money – it really is core to our business.

LXF: What was the intention behind making Linspire look so much like Windows XP?
MR: We're not trying to be a dramatically better UI, because people 'speak' Microsoft. They've grown up with Microsoft. I gave a talk at a university not too long ago, and I realised that every person attending that university had only ever seen

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released 5.0 – this is our fifth version since XP came out, but XP hasn't seen one significant revision. We've had five chances to improve our product and we're still a year, two years, from Longhorn – maybe longer. This is a huge opportunity for us – we would be fools not to seize it and really do the best we can to improve our product.

LXF: Why isn't the CNR software open source?

MR: I want people to use the CNR service because I think Linux needs profitable companies. When you go to a retailer, it's not enough to say Linux is free. They want to know: "How can I make money? Will there be companies I can call upon?" There has to be a viable economic model for a Linux software company. Red Hat has found one, but it's high-end, $1,500 and it's not on the desktop. So what is that desktop model going to look like? I think it's going to be a very low OEM

cost, and then an ongoing service as a supplement to that. We want to have that online service as part of our revenue source and so we do keep that software to ourselves – it's something we've invested a huge amount of work in. We've done about five million CNR installs, so we're darn good at this now.

LXF: Would you ever reconsider Linspire's stance on providing root access by default?

MR: Why are you assuming that root access is any more or less vulnerable than logging in as a user?

LXF: Well, it's easy to write a script that takes advantage of having access to the whole filesystem.

MR: But who cares? What's valuable on a person's computer?

LXF: That's exactly the problem with something like XP, where it's the system directories that harbour trojans and viruses.

MR: I disagree with that. I would say the reason we have a problem with Microsoft Windows is because of shoddy coding [*LXF would like to point out that this is Michael's opinion!*]. That's the root of the problem. The fact that there are zombie PCs out there is just the end result, and not the root cause.

LXF: But having root privileges means that anything you execute, could compromise your system.

MR: That's not necessarily true. It depends on whether the script is set to executable. But even if it is, you can run things in user space too. What's valuable on a PC is the user's data – no matter how they're logged on, they have to have access to their data. What's so funny is that you see all these comments about it, and what does it evolve to? Well, it stops people from typing **rm -Rf**. So I challenge you – point to a specific example where there are two computers, one that is logged in as root and one that isn't, and show me how you attack the one logged in as root. The reality is that Linspire, from our very first version, shipped with a locked–down firewall. We were the first Linux to do that. We don't ship with SSH, we don't ship with... I could go on and on and

"WHEN YOU SELL SOMETHING, YOU GIVE THE KEYS OF THE CAR TO SOMEONE ELSE. IF THEY WANT TO CRASH THE CAR INTO A WALL AT 200MPH, HEY, IT'S THEIR CAR."

on. All the incoming ports are blocked, so there's no incoming access. It doesn't matter if I'm logged in as root or as a user, and that's my point. If you guys can show me examples, we're happy to change, but make no mistake about it: the user chooses what they want.

LXF: Do you think the average Linspire user needs to know they're running Linux?
MR: We're trying to make the technology seamless and invisible. When we first started the company, we almost never mentioned Linux. But now, Linux has gotten some awareness, so we do say: "Hey, we're the world's easiest Linux!" But teaching people about the nuances of Linux, and how it's different... I don't think most people care about that.

They just want affordable, easy-to-use, safe computing.

LXF: Let's move on to *Lsongs*, the Linspire music manager. Will this become a bigger part of Linspire, as *iTunes* is doing for OS X?
MR: Apple's done a terrific job with *iTunes*, no doubt about it, and we have some catching up to do at MP3tunes

[the online music store Robertson launched early this year]. But I think you'll see us be aggressive and innovative. We always were at MP3.com, and I think you'll see us catch up to Apple in a very short time period. We have some big things planned that we're working on right now.

LXF: How about iPod support for *Lsongs*?
MR: We're working on putting iPod support into *Lsongs*. It's hard because Apple doesn't release the toolkits or developer base to work from, so you have to reverse engineer all that. It's tricky, but we're making some good progress, and there are a couple of people out on the internet working on that too.

LXF: Do you still use *Wine* for any parts of your OS?
MR: No. We sort of publicly abandoned *Wine* maybe two and a half years ago. Long term, Linux apps are the way to go. They're faster than running in *Wine*, and they're really improving – and it removes the cost. If you've still got to buy *Microsoft Office*, then you're not taking advantage of the cost savings from Linux. You still have to buy *Photoshop*, you still have to buy your *PageMaker*s, or whatever.

LXF: How does Linspire achieve its Windows Media compatibility?
MR: We actually have the source code for *Windows Media* – we're not just using the *Windows Media* DLLs. They gave us... I think it was actually *Windows CE* source code, and we had to get that working. That was a challenge, because someone dumped a big pile of code, with virtually no documentation, and we were trying to run it on a foreign OS that it's never been run on before. That took some real work.

LXF: Wasn't Microsoft a reluctant to part with the source code?
MR: Well, their public message is, "We'll licence people", and eventually, if that's your public message you have to actually do it. I think we're one of the first examples of that. I should stress that we have a *Windows Media* licence, but we don't have a DRM licence. Meaning that you can't listen to anything you've downloaded from Napster or Walmart.com. We've asked Microsoft for a DRM licence, but they won't give us one.

LXF: Is it the same situation for DVD playback?
MR: You can CNR *DVD Player*. We have an MPEG licence, and we pay the MPEG guys $3.50 a copy or something like that.

LXF: Do you think that people should be restricted by digital rights management?
MR: I don't think DRM is good business. I don't think it helps you sell the most products, and I don't think it's good for consumers. I'm anti-DRM, but I'm not anti-DRM for philosophical reasons, necessarily, as much as for practical reasons. If you want to sell the most music, make sure it will play on the most players. Give people the most value, where it doesn't time out, or expire, or reach a copy limit, or whatever. Let those paying customers have control over how they use their own media. I think that's important, and that's why I'm not a fan of DRM.

LXF: Do you think indie record labels have got it right, where the majors have got it wrong?
MR: That's how we started MP3.com. We aggregated all the little guys, and created the world's largest digital music site. I think we're off to a good start with MP3tunes as well, by aggregating about 30, 000 independent artists who said: "Hey, I'll sell my music in high-quality MP3, I'll let my music go into a locker [for

permanent storage] once you've purchased it." They have it right, and because of that – hopefully – they'll take advantage of this window before the major record labels come around.

LXF: Do you think the demise of MP3.com could have been handled better? (The buyer, Vivendi Universal, shut the service down in 2003 after failing to make it a viable paid download business.)
MR: Let's be clear here. I sold MP3.com, and when you sell something, you give the keys of the car to someone else. If they want to crash the car into a wall at 200mph, hey, it's their car. So, was it a huge, terrific disappointment that MP3.com went away? Absolutely. I even tried to buy it back to prevent it from going away, but I wasn't able to get a deal done. It was a real tragedy that this giant, one million-plus song library basically evaporated overnight. However, some new music sites, like PureVolume and SoundClick, have stepped up to try to fill that void.

LXF: You received acclaim in the open source community by putting up a sizeable bounty for the Xbox Linux Project in 2002...
MR: $200,000 was the total amount. I believe I paid out either $150,000 or $175,000, I'm not sure. Ideally, [the goal of the contest was] was that you wouldn't need any additional software or hardware; you'd pop in a CD and be done. We didn't reach that goal, but they did reach the point where there was a software-only methodology. It did require a commercial software program purchase, though.

LXF: What was your motivation for putting up the money?
MR: I wanted to emphasise the risk that DRM poses. I like the world that we have with PCs. You buy a PC and you can install any piece of hardware on it, any piece of software on it. And I fear that we're moving to a world

> ## "EVEN IF I DIDN'T HAVE MONEY, I WOULD STILL BE ABLE TO DO LINSPIRE. I WOULD BE ON A SHOESTRING, BUT THAT'S WHAT MAKES IT FUN."

«where Longhorn has some security hard-wired into it. Xbox was training wheels for: "How do I lock a system down and prevent people from installing software?" What do you think software will cost if Microsoft charges for every piece of software that you can install, and has to approve every piece of software? Well that's the way it is with Xbox.

I don't want that. The whole motivation behind the Linux on Xbox project had nothing to do with spiting Microsoft. It had everything to do with the fact that I don't want the world to be locked down. I want people to be able to work on their car if they want to. I don't want the hood welded closed, or to only be allowed to buy gas from one gas station. I want there to be freedom with your hardware and freedom with your software. Regardless of the eventual outcome, were they successful in hacking the Xbox? Largely, yes, but it also raised the consciousness of the issue.

LXF: Is that why you remained anonymous until the payment was made?
MR: I remained anonymous because I didn't want this to be perceived as:

"Oh, you're just trying to make life difficult for Microsoft." The goal here is trying to prevent a world where consumers don't have control of their hardware. The team members later on asked me if they could go public with my name, and I did it, semi-reluctantly, because I didn't want it to be perceived as trying to spite Microsoft. It happened to be with Microsoft equipment, but if it had been anybody else's, I would have felt just as strongly.

LXF: Are there any opportunities left for internet entrepreneurs?
MR: I think that the music opportunity is pretty much tapped out – meaning that it's now a place primarily for big, well-funded players. Video is obviously the next step beyond music, but the bandwidth has to be there and I'm not sure it is yet. VoIP is another huge area of lots of opportunities.

I think there's going to be more and more focus on tasks moving online. By that, I mean looking at things that people used to do offline moving to online. I'll give you a really silly example. There's a site called **www.paperdollheaven.com**, and it's a *Flash*-driven site where you dress up

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different models – Britney Spears, Halle Berry, Eminem... You can put clothes on them, you can put make-up on them – it's dressing up that girls used to do in the physical world, and has now migrated to the digital world. I think it's a fascinating trend to watch behaviours that used to be offline move online, and the communities created around them.

It's easy to look at it and say, *Google*'s been done and *Skype*'s been done, the digital music thing's been done. Maybe the opportunities are smaller segments, but there's still such tremendous opportunity that I think it's just a terrific time to be an entrepreneur. You can get one or two guys, get some cheap Linux boxes

– $1,000 will get you a damn great server now. Bandwidth is almost free. You're just limited by your ideas – how innovative can you be?

Because I did make some money, I'm able to do several things. But even if I didn't have money, I would still be able to do MP3tunes, or the SIPphone, or Linspire. I would be on a shoestring, but that's what makes it fun. You know, rally the troops and convince your friends to help you out. I think there's tremendous opportunity still out there, all around us, and if there are entrepreneurs out there, I would say go for it: take the plunge, start building it. Don't write the business plan – go build it, deploy it and then see what happens. **LXF**