

Q What are the main opportunities for Red Hat in the coming year ?

A We always knew that the market for Linux was getting bigger and bigger, the question was how could we make money from that growth as a Linux provider. You can see how the hardware vendors benefit and the big software vendors too.

A lot of commentators would ask "How do Linux providers make their money". They could see how money was made through selling boxes, training, support, but it was hard to see how they could really be successful, while, at the same time, remaining true to the Open Source ethics that Linux providers had built their businesses on.

That was always the dilemma we faced, being true to the open source community and, at the same time being true to the shareholders, especially for Red Hat, as a public listed company, we have a responsibility to be financially successful. Quite a challenge.

The thing that has changed has been the adoption of the enterprise customers. Historically, the enterprise market we have addressed has not been handled with an enterprise capacity, both as a vendor and also in the way they have used our technology, which, often has been in the back room, undercover, without any official endorsement, as mail servers, DNS server, web servers, edge of the network type services.

The customer could go down to PC World and buy one of our packages and go and install it on as many servers as they wanted. Many companies would also put some people on Red Hat training, but the majority of the machines being installed would not need mission critical, 24/7 support, the customers would back-up their own machines, and so, Red Hat wasn't seeing any support revenues.

Q How does a company like Red Hat scale its business around this type of business practises ?

A We kept thinking that these servers must be more critical, if it is a big name company, they must need support and, it proved that they didn't. The servers being installed were by the back-room guys who were taking the decision to do a Linux install for their own peace

Scott Harrison interview

Crystal Gazing

We managed to catch up with Scott Harrison, Red Hat's director for Northern Europe, working out of Guildford in the UK. Scott has brought 15 years of enterprise accounts management skills to Red Hat, having worked for Sybase and Powersoft before that. **BY COLIN MURPHY**



Scott Harrison, Red Hat's director for Northern Europe

of mind, to make their own lives easy. Often the best option for them was to build a cheap old Intel box with Red Hat, configured as a Samba server or whatever was needed. The reliability of the server meant that it just hummed away and no one ever noticed it, because it was never a problem.

This was happening with our smaller users and our enterprise market, that was the nature of the Open Source business.

The thing that has changed for us has been the downturn in the economy. We've seen some of the investment banks and even retail banks taking a much closer look at the cost of infrastructure, when putting in new applications into

their mission critical computer systems. The demands for these systems are fundamentally different to the peripheral servers and, more importantly, they are prepared to pay, on a per server model, for the services they now require.

Q Can you explain how those demands change ?

A There are a few key differences. One key thing, the support by independent software vendors and their certification around the platform, and part of that is how we behave around our product. This has been one of the challenges as we started to engage with the more mission critical enterprise market. We started to get feedback from them and when we would approach the ISVs for certification, we would also get requests. The nature of the request was very common, they would all say that the Linux companies were producing technology at such a fast pace that they couldn't keep up. They couldn't and never would want to update their systems every six months, the average turn

“The main thing required by a Unix Infrastructure Manager is stability.”

around for the release of a Linux distribution, which was seen to be needed because of the development of Linux. This didn't matter to the backroom guys, who could take the decision to upgrade

their distribution only if it offered something they needed for the server tasks they were running.

A Unix Infrastructure Manager has a far different set of criteria. If he is then responsible for the ‘gate’ that every server has to step through in order to be deployed in the datacenter as either an application or database server, he will want to go through a checklist of items to make sure it won’t cause a problem. Linux has only been on the outside of that ‘gate’ up until now. Now we have the sponsors in these big companies saying that they want to take Red Hat servers, the ‘gatekeepers’ have been saying “No – not unless you can show that you satisfy all of the things on my checklist.”

The main thing that is required by the ‘gatekeeper’ is stability, of the version and of the certification of that version. The ‘gatekeeper’ will only be looking for major updates every 2 – 2.5 years. The idea of having to do an upgrade every 6 months is just too unpalatable.

Q How do you provide for this stability at Red Hat ?

A We now produce two product lines, the standard package, Red Hat 7.3 at the moment, which, in turn will move to version 8 and 8.1, 8.2, etc. Usually there is a major version number jump after x.2, so the next version after 6.2 was 7.0. This will continue to be revised every six months or so, as has been the case in the past. The major change in version number means that there has been a major and fundamental change to the technology in that package. This means that by the time version X.2 has come out, it will have been tested fully and bug fixed the most and will be the most stable and secure version.

New and separate from this is the Advanced Server, which is only the first in a line of Enterprise products. This is based on the standard package of Red Hat 7.2, and it is our expectation that the next version of the Advanced Server will be based on 8.2, three release cycles, or 18 months away. More importantly, for our customers, we have committed to supporting the Advanced Server products for a minimum of 3 years. As a result, this will also guarantee the support and the certification from the 15 or so ISOs that we work closely with: Oracle, Veritas,

BMC, and IBM Software, etc., who have committed to the platform and their certification for it. After all, they had the same problem keeping up with us with their certification schemes.

This is where we see the future of our business, because it is customers like these that have been paying us the largest amount of money.

Q Have there been any advantages to the technology in Red Hat through this certification process ?

A Yes, because of the relationships built, we are getting much more feedback from the ISVs. We now have dedicated people in Red Hat who act as a conduit for the ISVs. The ISVs no longer just tell us that a product is certified, but they make suggestions as to how it could work better with their product.

A case in point is with Lotus Domino and the number of concurrent users at any one time. 18 months previously the maximum support was for 50 concurrent users, but once we started getting feedback, this changed to 400 and then to 7,000 concurrent users very quickly. These were all little changes, but without the feedback, we would have been none the wiser.

Q What is in the Advanced Server and how will you be charging for this new service ?

A The makeup of Advanced Server includes new technologies, like clustering, thanks to having on board the developers who originally worked on Convolo Cluster, which became Mission Critical Linux. We have also backported some of the version 2.5 Linux kernel functionality including asynchronous I/O with the help of Red Hat kernel engineers like Alan Cox. This helped to dramatically improve the performance of products like Oracle 9i to the point where Oracle 9i on Advanced Server is posting some industry leading performance benchmark figures. We are no longer in a catch up mode

with the Unix vendors in terms of performance, we have overtaken them and left them way back.

We will provide Advanced Server to the market in a slightly different way to our other products. We will ask people to sign and accept an agreement with us for per server installations for which we will charge an annual subscription, which includes the provision of the media for installation and access to the Red Hat Network. The Red Hat Network is the exclusive way customers will be able to update their servers. Accepting the agreement means that you can only use our product on the servers the customer has paid for.

Added to this are three categories for

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support. The Basic package, which includes the installation media and some basic installation support is US \$800 per server per year. Adding on to the basic package support during normal business hour will cost US \$1,500 per server per year and for 24x7 support, for those with critical systems it’s US \$2,500 per server per year.

We have developed a model that means people can derive value on each server annually, which includes the mechanism for updates and management through the Red Hat Network. They will now also be able to get the type of support that the enterprise market needs, including the service level agreements.

We must make per server revenue to make back the costs to us for all of the development work, like the cost of the ISV engineers that have helped to gain the certifications.

Because of the certification implicit in Advanced Server, if the user has a bug or a problem with one of the ISV applications that they are using, that vendor will be able to offer support

because they know they are dealing with a known and recognized system. If they are asked to solve a problem on an unlicensed machine, they will be much more reluctant, because they have no idea what is really on the machine, so the problem could be coming from anywhere.

Q Do you still see a market for the desktop for Linux ?

A Yes, Red Hat do still see a future for Linux on the desktop. As a Linux company we have been big supporters of things like the Gnome project, partly fearing the way that KDE suggested that they wanted to go proprietary until they

“We see the competition not being the other Linux distributors, but Sun and Microsoft.”

saw sense. But now we have two healthy desktop environments. We are also part of the Eclipse project which helps with development and helps to produce the toolsets that developers need to produce applications for the desktop. Eclipse also has support from IBM with some of its Java tools.

We have been doing quite a lot to support the desktop, behind the scenes, mainly from within our Open Source development side of Red Hat. We haven't yet felt that we can generate worthwhile returns by producing a desktop specific product, so we have spent a lot of our time pushing the Advanced Server. But now, a lot of the companies that have accepted the Advanced Server model are now coming to us for desktop solutions. Some of our big customers have actually said that their ultimate goal is to have a Microsoft free system. So, we are now looking with them for solutions to corporate needs on the desktop.

They are finding problems with the chore of licensing issues and the need to run bloated software just to send an email or write a few letters. 80% of the needs for the corporate desktop are available now, there are those power users of Excel or Powerpoint that will

always be a stumbling block, for which StarOffice doesn't quite meet their needs.

We have not actively tempted that market, we have waited for them to come to us. When they are looking for an alternative, they are much more likely to pass over some of the shortfalls that the Linux desktop might have, rather than us pushing the product to say it is a complete replacement for the Microsoft desktop. That way they are much more open minded.

Maybe in the next six months you should see a formal commitment to a workstation / desktop product in the Enterprise line, which will be for customers who are prepared to pay for us to behave in a different way –

getting certification for customer, getting libraries for developers, etc.

The big problem most people have is the lack of a Domino Notes client, and there is increasing pressure being put on Lotus by their customers, to provide it.

Desktop migration can only be helped by the stance that Microsoft have adopted, treating their customers as buckets full of money that they can just dip their hands into. The way they can just change a line in their licensing means they can just Hoover up more money. People will start to look for viable alternatives.

Q Are there any big stumbling block that will hold people back from migrating to Linux ?

A The one key thing that is stopping the massive wave of movement away from Windows is application availability. This is the thing we found on the Server platform, which is why we started our ISV program, so they could standardize on one of our products for their server applications. Windows must have the most amount of applications written for of any other OS. As it stands today, I can't see the the average home computer user taking to Linux unless they are really enthusiastic.

Q Has OpenOffice and StarOffice 6 made much of a difference to aid in the migration from Windows ?

A I personally am still a user of StarOffice 5.2, so personally I can't comment on usability. But, some of the things that Sun are doing around StarOffice 6 is one of the reasons why we are putting support into OpenOffice. I understand that it is the corporate decision makers that are behind the way StarOffice 6 has been licensed.

We are going to put all of our effort and support behind the development of OpenOffice. We don't believe that Sun are going the right way about StarOffice 6. I have recently heard from some reports that Sun hope to make 60% of their revenue from software sales and that a large proportion of this will be from sales of the StarOffice suite. That's just becoming another Microsoft and we don't think that that is the way it should go.

The concern is this is the thin end of the wedge, because, once you have a license, and you have established that it is a licensed product, then it is just a question of how much.

The danger is what would happen if Sun created a large user base, with people locked into the product, they become easy targets for exploitation.

The hard thing for any company that hasn't built their business model on open source is getting their head around Open Source. Red Hat , from day one, launched its business as an Open Source company, while Sun is, fundamentally, a proprietary company.

Sun have seen that healthy software companies derive much greater profits than healthy hardware companies and that software is probably a good place to be. Now they are looking for the 'killer application' on Linux to improve their position further. Our view is that this is not the way to drive it forward, what will happen is Scott McNealy will become a mini-Bill Gates.

For the moment we will hedge our bets on StarOffice, but we will most likely push forward OpenOffice.

As long as Sun continue to behave in a constructive way, then all well and good. The great thing about Open Source is that it does keep people honest. But there is enough skepticism about Sun to keep the OpenOffice development very healthy and lively.

Q What pressures can you put on companies like IBM to help bring

forward new versions of Java that will work with code compiled with GCC 3.1 ?

A Being part of the community we do a couple of things. We encourage these people to bring out code that will support it.

Under our Red Hat Advanced Server guise, the ISVs that we have a close relationship with have accepted the responsibility to bring out code that we can certify against.

The other thing that we do, especially with companies like IBM and Dell, is to ask them to release non-critical software, things like drivers, that we can look at, to detect any problems. They understand the need for a working and compatible driver to make sure they can sell the hardware that will rely so heavily upon it. We are encouraging the hardware and software vendors to release as much as they can, so that it can be better scrutinized by all of the Open Source community. So we bring pressure to bare.

Q LM: Do you think that this will increase, that these companies will accept more of the open source ethic ?

A They will release some of it. I think the challenge they face is that they are a bit embarrassed by their code, because a lot of it gets rushed out and is quite badly written, especially when compared against the flowing, self documented code that the open source community manages to generate. We even know of some cases where they have re-written the code before releasing it to the community just to make it more presentable.

Q Sun are bringing out their own version of Linux. What will this do to the market ?

A Our understanding, what we've heard and been told is that Sun are taking a version of Red Hat and just making a few modifications to it. If Sun are going to contribute resources and efforts and become a part of the open community then we welcome that. Any hardware vendor that produces their own distribution, is that going to work in the long run?

IBM must have had thoughts about bringing their own distribution out, I

think the reason they didn't is because of the very things that were not in place, and only now addressed by our Advance Server products, a common platform, that will be certified by multiple vendors, including all of the hardware vendors. If Sun bring their own version out they won't benefit from this. What they will have is Sun's version of Linux, which is a Red Hat derived product.

I haven't seen open commitment from Sun to say that they will do a lot of the development work, which would suggest that all they are going to do is leach off the work that Red Hat has done with the community. Unless they are prepared to put in, then they are not going to be seen as a contributor and part of the Open community. If they just take out, and link to proprietary hardware then that is not going to be seen in a very positive light, by Red Hat or by anyone else.

Time will tell. The sensible thing for them to do would be to work with the Linux distribution companies and say that we want to certify out Intel or Sun based hardware against this and work with us, that way they would get the certification.

For Sun, as a hardware vendor, to say that they are going to bring out their own version of Linux flies in the face of what is happening and evolving in the open community today.

Sun is a company that is thrashing around trying to figure out what has gone wrong, having had a terrible time in the last couple of years. Part of their reaction to seeing the way that Linux is going is to say that if we can't beat them, we'll better join them.

But, if they are going to be taken seriously, they have got to join it in the right way.

Q What about UnitedLinux, how will this change the Linux world ?

A Our view of UnitedLinux is that it was a reaction to the Red Hat Advanced Server, crystallizing the thought of the other Linux distribution companies, that they were not being taken seriously and getting certified by application companies.

Our conception of Red Hat Advanced Server came about through discussions with enterprise users, like investment banks, and the ISVs that they use. With

the virtue of being early with our enterprise customers, who forced us to have those discussions, we started to develop our thinking about the enterprise products. There was a year's worth of discussion and work before we announced the Advanced Server.

Once this process had started, the ISVs saw that this was a far better model for them to work with. So, when SuSE come along to get their latest version certified, just six months on from the previous version, I think the likes of Oracle and Veritas gave them the cold shoulder and told them to work in a similar way to us.

Our understanding from the ISVs was that they were saying that Red Hat Advanced Server will be the only platform we certify against because it's the only platform that is acting in an enterprise fashion.

Some of the smaller Linux distribution companies, like TurboLinux, might not ever get certified again, because the returns on investment were so small. It just wasn't worth their time to go through the certification process.

SuSE, while being the next most respected distributor of Linux realized that they didn't have the coverage in areas like the AsiaPac market, so a partnering with Caldera, Connectiva and TurboLinux would boost that coverage.

By bringing them together and unifying the code base, they now have something presentable to offer ISVs for certification.

What we have is two enterprise version of Linux, both now acting in a very similar way.

Q Do you see this as competition to Red Hat ?

A We see the competition not being the other Linux distributors, but Sun and Microsoft. We are very open about all of the various Linux options and invited them to take a look at the other Linux vendors so that they can make their own mind up.

There is some healthy competition between the Linux companies, but we all realize that if we scrap about in the Linux market that is available to us at the moment then we will not get anywhere. If we were to do that we would be missing the point, it's the massive piece of pie that's owned by Sun and Microsoft that we need to focus on and so all benefit. ■