

Re: [SLE] Machine Building – Nightmare Alley – Compatibility and Upgrade

Source: <http://linux.derkeiler.com/Mailing-Lists/SuSE/2004-09/0159.html>

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Date: 09/01/04

To: Suse Users <suse-linux-e@suse.com>

Date: Wed, 01 Sep 2004 23:20:34 +0200

On Wed, 2004-09-01 at 19:52, Ted Hiltz wrote:

> *Anyone having experience and useful information on this subject, PLEASE*
> *respond.*
>

Okay, Ted, I'll join in....

> *I have tried several times to email you back but the list has been*
> *rejecting my email thinking it to be much larger than it is. Since that*
> *time my entire email system has been in trouble. Some kind of virus was*
> *pumped through my Linux gateway machine and into my XP Netscape managed*
> *email system. I lost some 7000 messages before I had everything fixed*
> *and running again. Only my Inbox was hit and made completely useless.*

Sorry to hear that, I only do email (remote) on my Linux server, so that I am virus immune, and I have all my emails in one place.

At the moment, Evolution on SuSE 9.1 (upgraded from 9.0, upgraded from....) carries about 2 years (or is it 3 now)?

> *Any way I would like to pick up from where I lost my email ability and*
> *so have created a new thread on compatibility issues when building a new*
> *Linux machine. I notice there is a somewhat similar thread of a 64 bit*
> *Gigabyte board.*
>
> *Does anyone know where I would get CHIPSET information in the Linux*
> *SuSe 9.1 help files? However I'm not sure if this (as a separate*
> *exercise) would ensure compatibility. See what I have to say further on*
> *and everyone is welcome to comment.*
>

Well I guess I could give you my Motherboard and chipset, But I'd have to search for hours through my cosets to find the documentation.

On the other side I've been using Gigabyte boards with SuSE for years no

problems with the MB, no problems with the Network cards, no prblms with the graphic cards.

My Secret? It is simple, I NEVER BUY TOP OF THE LINE. I NEVER BUY ANYTHING NEW IMPROVED. My suggestion for you, go cheap. Buy the cheapest network card on the market. Has for sure a realtek chip, and you'll have absolutetly no problems with it. Buy the motherboard model that came out at least a year ago, they are cheaper and have no problems.

> *Hans*

>

> *Thank you so very much for your very informative and detailed reply.*

>

> *Can you make a specific recommendation from the most recent Gigabyte boards (including processor choice, memory choice, on board "Chip Set", etc.). If you feel safe in your recommendation I would appreciate hearing back from you on your recommendation. I don't want an older Gigabyte board?*

>

Yes, you want an older baord.

> *I have 2 CICERO computers (one XP, the other XP Pro, manufactured for Future Shop, a computer and appliance super store here in Canada) I mention this only because the XP machine CPU board died and the extended warranty applied. The service company wanted to put a different board in because the original was no longer manufactured. I guess this must be a problem with big retail chains -- they constantly shop around for the best deal from a money standpoint rather than a quality standpoint. Anyway, I insisted that the repair service find a board with the same chipset (so I could use my backup if required) and hopefully so we could bring the system back up from the existing disk boot MBR. It went well except some applications reinitialized. The new board was a Gigabyte P4 Titan socket 478 mother board with a Pentium 4 processor running a little less than about 2 Gig (or so I understand). The model was GA-8SIMLH-P SIS651/962I/AGP4X/Socket478 for Pentium 4/2 DDR DIMM/Micro ATX/LAN/6-CH Codec/USB 2.0/.*

>

If they offer you good service at a resonable price, buy all means stay with them. Good service at a reasonable price is priceless! (Sorry for the pun, just couldn't resist)

> *As a result of this board switch the graphic card misfunctions using HotMetal Pro 6 web authoring tool and I had to use the built in on board graphics function (at lower resolution) which steals memory to operate. BUT I have never used a Gigabyte CPU board for Linux let alone one with an AMD chip.*

>

SuSE: Re: [SLE] Machine Building – Nightmare Alley – Compatibility and Upgrade

I have 2 or 3 in service as Servers. As Servers I don't really need the graphic cards as the server terminal stays in text mode anyway. But on the server at home I did load the NViDIA drivers to get OpenGL 3D rendering, as it's the only machine I can play Tron on....

- > *Yes, you have somewhat relieved my concerns but I would feel better if*
- > *you or someone else could come up with a recent or the same board along*
- > *with all the components in the system. That graphics board which I*
- > *cannot use was costly.*

Costly Graphic card on server? I'm missing something here.

- > *The other day I began to experiment around with*
- > *a refurbished unit (Pentium 4 at 450M -- would have preferred at least 1*
- > *gig) unit and had installed Linux SuSe 9.0 from a CD-Rom kit that came*
- > *with a magazine. It came with 2 CDs, desktop and server. I could not*
- > *install TELNET, FTP and other servers as both CDs seemed to be*
- > *identical and desktop. The desktop was nice but I did this towards*
- > *getting a SuSe based server centric gateway/router system up and running.*
- >

Yes, the 3coms are very well supported. Almost as good as the realtek's are...

- > *The first problem other than no servers to speak of was the the LAN NIC*
- > *card was not detected. I put in an expensive 3 Com card (my maintenance*
- > *spare) and it was immediately detected. By this time I am getting upset*
- > *as I spent an entire day fighting with the Magazine special (full*
- > *distribution, they claimed) SuSe 9.0. The other day my wife and I made*
- > *a 63 mile one way trip to Edmonton (Alberta, Canada) from our farm*
- > *location where I have my home and development LAN (some 15 computers,*
- > *Linux, XP, and Win95) to Compuserve where I paid \$129.00 CDN dollars for*
- > *SuSe 9.1 Pro and I am hoping the Box set will give me all the servers I*
- > *want. It costs about \$20.00 to \$30.00 dollars to drive round trip to the*
- > *city and shop around plus meals. So now I have the SuSe User and*
- > *Reference Manual and I don't have to go blind (my eyes are very*
- > *sensitive) reading a PDF file from a bright glaring screen. I decided*
- > *that the price was close enough to the large money exchange difference*
- > *between USA and CDN dollars plus shipping and other charges to buy the*
- > *box set from the store rather than have it shipped to me by courier from*
- > *the USA.*
- >

SUpport your local Dealer, good for you...

- > *Also I notice that Linux now has more than ext2. My current Linux*
- > *machines all run ext2 and they were put together using SuSe 6.4 and 6.2.*
- > *One of my concerns is that almost all these computers are unique with*
- > *most having a different CPU board than the other. I could not afford*
- > *the Enterprise version and am having a hard time understanding the*
- > *difference between the 9.1 Pro and the Enterprise version other than the*

SuSE: Re: [SLE] Machine Building – Nightmare Alley – Compatibility and Upgrade

- > *enterprise version comes with a special server (s) that do MORE of what*
- > *I don't know but do it from a central network location and somehow*
- > *bridge the differences between machines .*
- >

The Enterprise Version is more stable, it is certified by ORACLE, IBM, NOVEL, SYBASE, and other enterprise companies to run on/with thier hardware and/or software. This is important when you are planning a Multi–Million dollar project, and cannot afford to run into incompatibility problems.

Of course getting the thing certified by all these companies is a lot of work and cost mague bucks. That's the reason for the price.

Officially Oracle only runs on Enterprise, that is to say that Oracle is not about to change thier installation/configuration and test thier software for each patch SuSE puts out on the Pro version.

- > *So I am gambling that 9.1 Pro will at least give me what I've got with*
- > *6.4 Suse but more recent.*

It will and it will give you much more, Linux has advance at least 2 generations since SuSE 6.4

- > *Another concern, and I thought I had it solved*
- > *with 6.4 SuSe was the ability to make transparent upgrades including the*
- > *kernel.*

This would have worked, but 6.4 to 9.1 is a little too much to ask for. At anyrate, the software has changed so much that you would have to configure everything new anyway...

If this would somehow work, I would suggest you do a new installation anyway!

- > *But SuSe has told me by email (from the pre purchase sales*
- > *department) that I will have to install their SuSe 9.1 distribution from*
- > *scratch on all my SuSe machines. I am hoping that 9.1 will allow me to*
- > *install the latest browsers as they evolve and other things.*

Yes, it will, but SuSE, does not provide every update for every application. They try to find a middle of the road where they update some applications often. But most are pretty old. You may have luck with netscape...

- > *I CANNOT*
- > *do this now with SuSe 6.4. I tried installing Netscape (again using the*
- > *binary from one of these Magazine CDs) and the first problem was I was*
- > *lacking certain libraries and even if I went out and got them there was*
- > *probably some incompatibilities between the kernel calls of my present*
- > *kernel and what the binary for Netscape would be calling and expecting*
- > *as results.*
- >

If I understood you correctly, you tried to install a package for SuSE 9.1 on SuSE 6.4? That would not work no matter how much you fiddled with libraries. SuSE 9.1 is based on the 2.6 kernel, and 6.4 is based on what? the 2.2 kernel? This is like trying to install Ms Office 2003 on windows 3.1. It just don't work.

> *And it turns out that with 9.1 Pro I have obtained the latest KDE.*
>

That was probably correct 3 weeks ago, but last week KDE 3.3 was released. SuSE has provided an update for the Valourous, but it's not officially supported. Use at your own risk.

> *So I am beginning to wonder how best to put a system together when it is possible it could go obsolete hardware and software wise over night. I was going to ask some of these questions in a separate email to the list. I notice a lot of people are having problems of various sorts with SuSe 9.1 (mine is PRO and not yet installed until I have thoroughly read the manuals),*
>

I've always found SuSE to go on (relatively) smoothly, and to be extremely forgiving of my mistakes and changes in mind. It allows you to install/uninstall software nad be ready to test in minutes. And removes the software well from your system.

I would not be prone to design the perfect system before I start installing. Instead I gradually improve the servers I support.

> *So, as you probably recognized, I am trying to get as educated as possible on my next few Linux projects (since 6.4 distribution) in and effort to thwart my LAN from turning into a monstrosity to maintain -- although I think it has come close to that state already. I need a 60 hour day to keep up with the problems.*
>

That is really don't understand. I support 10 servers on 3 continents, (Africa, Europe, and North America), Each firewalling/serving a natted network.

> *So that's why I am trying to get a dependable and maintainable set up. That involves being able to upgrade on a continuous basis and do it transparently to the existing system, including the kernel.*
>

The machine I installed as server/firewall for my mother 'n law, has been running with out support for over 3 years. I don't even know what version of SuSE is on the thing anymore. The hardware I used there was throw-aways from the bank I worked at at the time! So I don't really understand this requirement. If your requirements change then of course you need to do work to change your network to meet them. But I don't

see the constant need to update your software other than the security updates.

But I think you would be more happy with Debian. The are firm believes in 100% (really not a single minute down) systems, and put a lot of effort in this. Personally, and my clients can live with a maintenance weekend or 2 a year.

> *I notice on this list (I subscribe to 14 SuSe lists) a lot of hype about
> Red Carpet which appears by the e-mail to be some kind of
> upgrade/installation facility based on RPMs. For a week now I have seen
> e-mail on this subject but have had time only to read a few. I would
> like to read them all. I don't think this facility comes with the SuSe
> 9.1 Pro distribution BUT I am looking for an application that will allow
> me to make "seamless" upgrades" to my Linux systems once I wipe them of
> the hard drives and install SuSe 9.1 Pro on the works.
>*

Red Carpet is now from Novel, and SuSE is now also Novel, so I guess it's coming, but last I looked it was an Enterprise Solution. (Updates whole slew of boxes at the same time, and cost per BOX!)

> *What I am going to do, and this really hurts financially, is simply save
> the old hard drives and put in new hard drives . That way I can go back
> to the original system and data by putting back the original drives
> (about 3 per unit, although one has 7).*

Disks have a limited life time... They will most definatetly crash. It's just a question of weither they will crash before thier MTF rating (Mean Time till Failure) or after. You may get lucky, But I would most definatetly spend the money on new disks.

I go for RAID. RAID stands for Redundant Array of Inexpensive Disks, as everybody knows. And I do just that, I buy 2 identicall cheap IDE disks and install software raid-1 (mirrow) on them. I insist on adding fans to the disks as the modern disks run very hot, and I've found that cooling them really extends thier lifetimes. I use workstation disks on my servers, (Did I say inexpensive?). When a disk crashes (will happen sooner or later to every disk no matter how expensive), I have plenty of time to go buy 2 new disks, pop out both old ones, boot from DVD, make new raid-1, and copy the system from the remaining good disk to the new raid. Down time about 4 hours, has happened twice in 3 years. I've had very good expirience with software raid. It allows me to mount the remaining good disk on any free IDE port, to copy from.

Twice I've used the remaining good disk at home, both times the disk crashed within a year. If I was you, the first thing I'd be changing is the disks!

> *That is one of the reasons why*

- > *I have another email on backups. I want to make a single backup of the*
- > *first SuSe 9.1 installation and then use that backup (if possible)*
- > *regardless of the difference in computers (CPU, graphics boards, sound*
- > *boards, LAN NIC, etc.) .*

I've never tried that, but should work as SuSE does automatic hardware and it's kernels are trimmed for compatability and not speed. It's not what I'd be doing, though. How many of these "identical" server do you got? I use a "one server for everything" philosophy, so I can't really see any arguments for a server farm.

- > *If this is even possible and no one on the*
- > *list has yet been able to demonstrate it is possible, then there is*
- > *still the task of identifying each LINUX computer with its own*
- > *(original) name and original static IP address which involves numerous*
- > *config (hosts, smb.conf, httpd.conf, and many others) and other*
- > *locations within the distribution.*
- >

I think if you let the host name be configured by DHCP, then all those headaches would go away right? You just need to configure the network card address in your dhcp server, to give a fixed address/name.

But if you really need the server farm thing. there is (was) a package in SuSE called ALICE. That was built to allow you to build server farms. The packages allowed you to make changes to the server configuration on the "Alice" server, and download the new configuration to the servers. All changes are saved in a change management system to allow you history of changes, remove changes, etc.

Best of all the servers where built hierarchaly, (ie. This server is a server type "C", but has these 2 specialities).

It was way too much overkill for my needs so I never implemented it, but it might be just what you need.

- > *Can't see the screen very well any more so I will generate more*
- > *information if you get back to me on what I have already written. ANYONE*
- > *else is also welcome to join in.*
- >

Maybe you need new glasses?
Or more probably a decent LCD 8-)

- > *Bye to all, thanks, TED*
- >
- >

Your welcome Ted.

Jerry.

SuSE: Re: [SLE] Machine Building – Nightmare Alley – Compatibility and Upgrade

P.S. I really really really hope this helps someone as I spent quite a few hours on it!

>

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Also check the archives at <http://lists.suse.com>
Please read the FAQs: suse-linux-e-faq@suse.com