Linux Commercial HOWTO

Martin Michlmayr, tbm@sypher.com, http://www.sypher.com/tbm v3.40, 7 December 1996

This document contains a listing of commercial software and applications which are offered for Linux. It is maintained by Martin Michlmayr <tbm@sypher.com>.

Contents

1 About this document

This is the Linux Commercial HOWTO. It contains a listing of commercial software which is available for Linux. The Commercial HOWTO doesn't contain any information on Linux distributions – this is covered by the Distribution HOWTO.

This document was originated by Harald Milz <Harald.Milz@Linux.org>. It is now maintained by Martin Michlmayr <tbm@sypher.com>.

If you need to know more about the Linux Documentation Project or about Linux HOWTO's, feel free to contact the supervisor Greg Hankins <gregh@sunsite.unc.edu>.

Greg Hankins will post the listing to several national and international newsgroups on a monthly basis. In addition, the Commercial HOWTO is available via FTP at ftp://ftp.sypher.com/tbm/HOWTO or can be found on the World Wide Web at http://www.sypher.com/tbm/Commercial-HOWTO. New versions of the Commercial HOWTO are always placed at these two sites first, so please be sure to check if the copy you are reading is out of date!

The Commercial HOWTO is not a forum for product announcements or marketing hype; it is a service for potential customers and the whole Linux community. Resellers will not be listed; the list is for companies who produce their software themselves. Two main goals are being aimed at:

- It shall help companies who want to run Linux to find software solutions and applications. The international distribution of this list will enhance the contact opportunity.
- It is meant to prove the commercial useability of Linux and thus to encourage other vendors to port their software as well.

Companies and developers who are offering their products for Linux and interested in joining the Commercial HOWTO are invited to fill out the following form and contact me at tbm@sypher.com.

This HOWTO contains tabular entries for each product (example follows). The entry format is similar to the Linux Software Map (LSM) entry (field/stanza lengths are arbitrary). If you want me to add your entry please *keep short*, otherwise I'll have to shorten your data. Furthermore, please send me plain ASCII data; no HTML, and no PostScript.

```
Category:

        Databases, Data Visualisation, Development tools, Financial
        Software, Mathematics, Network Management, Text Processing,
        X Windows or Other Software.

Name:

The name of your application.

Description:

SHORT description of the package, just the basic functionality.

Licensing Policy:

Whatever applies.  Is there a free demo or shareware version available
```

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via FTP or WWW?  Where?

OS Provisions:

Kernel version, XFree86 version, Motif version, RAM, harddisk usage, etc.

Documentation:

Printed documentation, page number, online help, language.

Extra Features and Add-Ons:

(and their prices)

Price Range:

Whatever it costs.

Vendor:

Address:
Phone: (U.S. and Canada: if you like to be reachable internationally,
       please don't enter only a 1-800 or 1-900 number)
Fax:
EMail:
Url:
Contact:
```

2 Copyright Information

please contact Greg Hankins, the Linux HOWTO coordinator, at gregh@sunsite.unc.edu.

3 Disclaimer

This HOWTO is not actually a HOWTO in the sense of the Linux Documentation Project. Instead, it is an instrument to investigate the commercial Linux opportunity and to list applications which were already ported and marketed in a native Linux version. As a software vendor, you probably know that you can alternatively offer Linux users a statically linked SCO version of your application which would probably run under the iBCS2 emulator (albeit with a small performance penalty and higher memory requirements). Such applications will not be listed here (see the iBCS2 documentation at ftp://tsx-11.mit.edu/pub/linux/BETA/ibcs2).

I will not select nor deselect any particular product. Instead, everyone who wants to have her product included will be serviced. However, I reserve the right to shorten individual entries to keep things in shape.

If you don't find a particular product or vendor in this list, this is probably due to one of the following reasons:

- I never heard of that product or vendor and thus didn't try to get in contact.
- I did get in contact, but the vendor didn't answer yet.
- I did get in contact, but the vendor stated positively that he doesn't sell his product for Linux (yet).

In any case, please get in contact if you feel someone's missing; also if you discover any errors in the file.

Sometimes two vendor's addresses are mentioned in the "Vendor:" field. In these cases I received the information from the German subsidiary/distributor. The original manufacturer's address is always mentioned first.

4 Related Information

There's another HTML page which covers commercial Linux software. It is maintained by Alan Cox <Alan.Cox@linux.org> and can be found at http://www.linux.org.uk/LxCommercial.html.

.

In addition, feel free to visit the All-Linux Shopping Mall at http://www.all-linux.com.

5 Marketing aspects of commercial Linux applications

This section was suggested by Orest Zborowski <orestz@eskimo.com>; it is still under construction.

It is meant to help potential commercial software developers to market their products. There are several caveats to watch when doing this, e.g. the GNU General Public License (GPL) and the GNU Library General Public License (GLPL).

I'd appreciate anyone who wants to share her experience with Linux-specific marketing issues to send me some lines (see questionaire below).

Please make sure that people interested in more specific items can contact you via EMail or fax.

5.1 Investigation

Here is a questionaire which I ask you to fill out and send me. Answers will be handled anonymously, and I will only disclose facts, no names. The facts you tell me will be of great value to get an idea how the commercial Linux market looks like. If you do not market your application in a native Linux version, please tell my why. If not stated otherwise, "application" stands for "native Linux version of your application".

- Why did you start marketing your application? Why didn't you do it earlier?
- How many copies of the application do you expect to sell
  - for Linux,
  - for all the other Unix variants,

  during the planned product life? (This information is kept confidential if you require)
- How many copies of your application did you already sell
  - for Linux?
  - for all the other Unix variants?

  (This information is kept confidential if you require)
- Which technical problems did you have porting your application to Linux? How did you solve/circumvent them?
- How many employees are working on
  - porting to Linux,
  - providing support to end users/distributors?

  (This information is kept confidential if you require)
- Does your company offer the support for the application or did you (attempt to) outsource the support? If you provide support yourself, would you like to outsource it?
- Which issues were important for the pricing? Is the application
  - more expensive,
  - equally priced,
  - cheaper,
  - shareware priced,

  compared to versions for other Unix variants?

- What types of end users you you address with the application?
- According to your experience, was it a good decision to start marketing the application? Will you port and market other applications too?
- Are there any copy protection issues you have/like to consider? If yes, how did you solve the problem?
- How do you think about the iBCS2 emulator and offering a statically linked SCO/ISC or other version runnable under the emulator? Why did you choose to offer a native Linux version instead?
- What is your warranty strategy (Do you restict the usage to certain kernel/C-lib versions etc.)?
- Which country-specific (e.g. legal) issues did you have to take into consideration? How did you cope with them?
- Are there any other important issues which I possibly (probably) forgot to ask?

5.2 Some Aspects

Porting to Linux simply means recompiling in many, many cases. Sometimes some `#include` tweaking may be necessary. If you develop your apps using GNU C/C++ which is very useful sometimes, there should be virtually no further work to do.

One big **advantage with Linux** is that all the source code of the operating system is freely available. Experienced programmers can easily spot the locations where problems occur and contact the "responsible" developer for assistance. I never encountered anyone being impolite – just make sure you read the respective documentation first...

The persons responsible for the Linux port should know where to get vital information in case of problems. The Linux Documentation Project offers plenty information about all and everything and the kitchen sink. The Linux INFO-SHEET is a good place to start with for beginners.

The key to success with your Linux port is **Internet access**, particularly **FTP access** to the big Linux FTP servers such as sunsite.unc.edu or tsx-11.mit.edu and their legion mirrors.

It appears that one big problem is **after-sales support**. If you do market your software for Linux, you should consider to employ someone who knows whom and where to ask in case of problems with the OS itself. On the other hand, you may expect problems with Linux to be solved **much** faster than problems with commercial Unix variants. For example, the */bin/login* bug allowing people to log onto Unix hosts as `root` without entering a password (known publicly in September 1994) was solved in a fortnight under Linux, whereas IBM shipped AIX with the broken */bin/login* for another couple of months (and didn't tell customers although there was a fix available via FTP).

After-sales support for Linux, on the other hand, can be a good opportunity for small companies and startups. If you want to sell a Linux version of your product you might want to find such a company to outsource the after-sales support (see respective section). They might even help you with the porting.

Some companies selling big and expensive software packages **offer completely installed systems**, i.e. the hardware, the OS and their specific software. In the contract, you can restrict your warranty to specific kernel/library versions so that problems are unlikely to occur at a later time.

The GNU General Public License (GPL) and the GNU Library General Public License (GLPL) contain no restriction in terms of marketing products developed with GNU tools as the GNU C/C++ compiler. Anyway, the legal strength of the GPL was never checked at court – I doubt it can be *enforced* outside the U.S.A. If you violate the GPL, you may expect being sued by the FSF and being bashed publicly by the Linux community – the GPL has a strong *ethic* value. In case of doubts, you might want to contact the Free Software Foundation. A very comprehensive interpretation in German is printed in section 1.7 of Kai Petzke's book "Unix fuer jedermann – Einfuehrung in Linux", Bernd-Michael Paschke Verlag, Berlin 1995, ISBN 3-929711-07-9.

In short terms: The GNU copyleft doesn't affect your software development and marketing at all. Feel free to sell your products without source code and everything, just as with every other piece of commercial software. The GNU Public License says, if you put a piece of software under the GPL, or if you receive it as a piece of GPL'd software, you have to offer your customers the same rights concerning that software that you have (i.e. hand them the source code, or offer to deliver the source code for the cost of distribution for three years after delivery of the binary). The GPL does *not* force you to put all your software under the GPL, irrespective of whether the operating system it's been written for is GPL'd itself. In this HOWTO, you'll find an entire bunch of commercial software products none of which is GPL'd.

Pricing: There are three major philosophies. Some companies offer a full or limited version for a very low fee or even for free. Others consider the Linux version as valuable as those for other OS's and offer it at a reasonable discount. Third, the price is equal to that of, say, the Solaris or the HP/UX version. Finding a reasonable price for your product may be somewhat more difficult than for other Unixes because there are many Linux users expecting to get everything for free. Others (seriously interested customers, i.e. business people and decision makers) know that nothing is for free. You'll have to decide for the target customer.

A word concerning **fast version shifts**. This is clearly a prejudice. From the view of a software vendor, this is clearly **not true**. Linux is no moving target. It *is* true that Linus Torvalds <torvalds@cs.helsinki.fi> sometimes releases two or more kernel patches per week (or even more) in the **hackers' corner** (odd minor kernel release numbers). However, if you found a kernel doing what it's designed to do (version 2.0 being a good choice as of this writing), there's no reason to upgrade. Leave everything as it is and limit your warranty to certain kernel releases. Selling complete systems helps here, too, because you can ensure the respective kernel and its device drivers work in perfect harmony with the computer, its peripherals and your application.

You might consider offering a **statically linked Linux version** too (as it is very popular for SCO due to some nasty bugs in several SCO runtime libraries) but please tell your customer about the additional memory requirement. However, it is important to mention that a dynamically linked application automatically satisfies all the requirements of any LGPL libraries that it uses, but a statically linked application does not. A statically linked application must be available in some relinkable form to satisfy the LGPL.

If you intend to offer a shrink-wrapped systems (i.e. a complete hardware/software installation) please **avoid IDE harddisks**. Those disks are a perfect **performance bottleneck** for a real-world multitasking OS if it comes to serious work. If some day EIDE offers busmaster DMA, this rule may change, though.

Two killer applications are needed under Linux: a good **text processing system** and a good **spread sheet**.

Copy protection is virtually impossible under Linux. Because the kernel and all the associated tools are available as source code, any experienced hacker can hook dongle or key card `ioctl()` calls. On a PC, you don't have a machine/CPU id available. You don't want to build a specialized kernel for a certain (and given) hardware configuration, not disclosing the corresponding source code; such a kernel would be a "derived work" according to the GPL, and doing so would clearly violate the GPL.

Last not least, don't forget that **university and college students** who are the **decision makers of tomorrow**. If you offer them a reasonably priced product for their beloved operating system today (think of campus licenses), there's little question which application they will choose tomorrow.

6 Linux for the Commercial Market?

People keep asking me "When is Linux going to be ready for the *commercial market*". I guess the first thing to discuss is what is meant by "commercial" in this context.

Some CD-ROM vendors have put the word "commercial" in their name, only to have the technical people think their product is good only for use by banks and insurance companies. Other people look at their product with disdain and say that "Linux is not *commercial quality*", because it is missing some feature they need, or they feel it is unstable (usually without ever trying it even one time).

To me, the word "commercial" has lost as much meaning in the marketplace as some of the other buzzwords:

- "Open" vs "Proprietary" (People are now saying UNIX is "Proprietary")
- "Workstation" vs "PC" (What is a workstation, anyway?)

In the old days of computing the commercial market was banks, insurance companies and business-oriented facilities where the use of COBOL or RPG was the mainstream. The technical market was scientific, engineering and manufacturing where FORTRAN and assembly language was used. Somewhere along the way the term "commercial" seems to have gotten twisted around to mean "ready for the mass market", versus "ready for hackers".

For the purpose of this article I will take the second meaning, and address whether I think Linux is ready for commercial purposes rather than the hobbyist and hacker market, and ready for the mass market rather than limited markets.

For those of you who hate reading long articles, or who are short on time, let me give you my conclusion right now. Then you can go out and drink beer or other fun activities:

"Yes, Linux is ready for the commercial market...in some cases".

In order for an operating system to be ready for the mass market it must have several attributes:

- have lots of applications

- be relatively easy to install
- have lots of applications
- be relatively easy to maintain
- have lots of applications
- be relatively easy to use
- have lots of applications
- not crash (much)
- have lots of applications
- be economical
- have lots of applications

But you can eliminate all of these considerations in today's mass market if only one thing is true:

You have lots of applications.

after all, there would not be 170,000,000 DOS systems in the world if any of the others *had* to be true.

I almost added that is has to be economical, but history has actually proven me wrong on that. If people added up the total cost of ownership, then Apple would certainly have won over the PC. But people ignore the human costs of someone else (or even themselves) beating their head against the wall trying to get something to work, or the system crashing repeatedly, or the fact that the one keystroke they can hit the easiest (through practice) is

```
<CTRL><ALT><DEL>
```

In the old days people were content to spend several hundreds of dollars on a simple ASCII text editor, or deal with a simple spreadsheet. And it took an act of mangement to get them, with lots of Purchase Orders. Today, they want multi-media integrated with their operating system, and have all the applications available that their neighbor (or boss, or compatriot) has available on *their* system. And they want to get these applications easily, certainly no harder than to call up on the phone to order them through a catalog, or go down to their corner store to get them.

Now what causes this plethora of applications for an operating system? Ease of programming? Good software development tools? Features inside the operating system? Stability of the interfaces over time?

The answer is "none of these". While all these attributes may help convince an application developer to port, the one overriding issue is volume of the operating system platform. Again, if MSDOS were compared to MacOS, or even to UNIX and volume were not taken into account, we know which two operating systems would have the most applications, and they would not be from Microsoft.

While it is true that several Linux vendors are working on getting these applications for the mass market (read this " your mother and father"), the number of applications that run on Microsoft platforms have been estimated as high as 35,000. SunOS has an estimated 10,000 applications, with other 'commercial

UNIX" systems (including Solaris 2.x) much lower in number. It will take the Linux vendors a long time to get the number of applications necessary to hit the really large mass market, particularly if they did not depend on iBCS2 and DOS/Windows compatibility (which could supply a fair number of current applications), but depended on "native" Linux applications.

So applications are king (and queen) for the mass market, and installed base (volume) or the promise of explosive growth (volume) is the key to these. But is the mass market the only "commercial" market? The answer is "no". The mass market is a subset (albeit very large one) of the commercial market. So let's look at what the rest of the commercial market needs. We will look at this by segmenting the market into:

- turnkey systems
- large end-user customers
- specialized markets

6.1 Turnkey systems

When I speak of turnkey systems I typically mean a computer system that has one specific (or not so specific) application that runs on it. Examples of turnkey systems are point-of-sale terminals, reservation systems, CAD systems, etc. But in a larger sense, other applications such as Web servers, nameservers (such as BIND), etc. could also be considered "turnkey", since they have only a few necessary programs that have to run on the system.

Usually turnkey systems are ones that an Independent Software Vendor (ISV) or Value Added Reseller (VAR) will chose a hardware system, an operating system, port an application to it, then duplicate that system 500 to 1000 times without change to the basic application. These ISVs and VARs will try to chose the lowest cost solution to fit their customer's needs.

Linux is perfect for these types of applications. The operating system is stable enough for the developer to port their application and test the application fully. Once it is fully tested and stable, the entire package is "frozen" and duplicated any number of times for the end customer.

Since the operating system may be freely copied, and it runs on inexpensive hardware, their variable costs are minimal. Even a developer who is not familiar with the Linux system (so they need help getting it running on a platform) will quickly pay back the porting and system programmer costs they accrue by not paying $200-$500. per license for the operating system. Plus they have all the source code for the entire system, in case they run into trouble later on. You can buy a lot of Linux support for $200-$500K.

As I said before, I include Internet Service Providers (ISPs) as part of this "turnkey" environment, for both external internet and internal internet. Why overload your expensive, high-powered, highly complex general-purpose server to do Web serving when a smaller, simpler box can offload it? Why not run your NIS slaves on a Linux box? Or perhaps your BIND server?

In the early days of Digital UNIX (known then as DEC OSF/1) we did not have very many applications. In fact we had none. The marketing staff came to me with sad faces asking if it was possible to sell an operating system that had no applications. I invented a term called "Turbocharging", which allowed a Digital UNIX system using the speed and power of the Alpha processor (as well as the throughput of our networking devices) to offload NIS, NFS, BIND and other services from people's overloaded, slower SPARC machines. We also showed people how they could use the rsh(1) command to allow the Alpha to do a portion of their very CPU intensive processing while delivering the result back to the SPARCs on their desk. This allowed the SPARCs to work more on applications and less on the other "system administration" tasks that they were performing. We sold lots of Digital UNIX systems based solely on executing those tasks. Today, of course, Digital UNIX has a lot more applications, and particularly very large memory databases that are extremely fast. But the same principle applies. The database engine runs on the Alpha system, supplying data to the slower SPARC engines as a "Turbocharger". I could see Linux systems headed in the same direction, following the same path.

6.2 Large end-user customers

Very large customers often have their own home-grown applications which they need to deploy across a wide network of people. Or they can have management dictate a certain suite of applications, which then can be ported to Linux. Since these customers are so large, their operating system costs are huge, and utilizing the savings using the Linux operating system they may completely cover the expenses of porting their software.

Or these very large customers may "influence" their layered product providers to port to the Linux platform. Finally, they may even change some of their computing habits (to use existing programs) if the cost savings are enough to warrant it.

Companies like Caldera are creating a suite of applications and approaching these very large customers to show them the operating system savings that they can achieve if they switch to Linux. While it is true that every application the customer could ever conceive of running may not run on Linux, by using the native applications, the iBCS2 applications, the DOSEMU applications, and applications that run under WABI, a nice suite of applications could be built to solve their needs.

6.3 Specialized markets

Finally there are what I call "specialized markets". Markets that might buy Linux simply because it is Linux, and not because of the application suites that it provides.

In the education field there are three main markets:

- administrative
- "campus computing"
- computer science education

The administrative part is the "business" aspect of the market. They are looking for easy-to-use systems that can also handle complex administrative tasks that might cover a community the size of a small city.

The "campus computing" is the supply of computing power and service for majors of all types, web services and research into non-computer science (for example, molecular modeling) research.

Finally there is computer science education, both on the undergraduate and graduate level, as well as research into computer science.

While the administrative sub-market typically relies more on shrink-wrapped applications, the other two rely on them to a lesser extent (with the computer science education market relying the least). The other two markets can utilize a lot more of the freeware and shareware applications that are already ported to Linux. This gives them a very low-cost (from a software perspective) platform while allowing them to see and (often) modify the source code for the applications they use.

More importantly, in the computer science research area, the results of the research can be freely distributed to others working in the field, or even published as source code to illustrate the results. This can not be done with "commercial" operating systems.

Some universities are utilizing Linux more and more to run their campus. From a "commercial" standpoint, their needs are the same as many large businesses. Students graduating from college will know about Linux, and bring the word to their future employers.

Finally, there is the computer hobbyist and software developer market. I relate this market to the amateur radio market. In the amateur radio market the radio is often used to simply talk to other people, but at the same time the users investigate new ways of using radio, and improving it. Many electrical engineers started out as amateur radio users. So it can be with Linux, since for the first time both the prices of the hardware and the prices of the operating system source code are within the reach of mortal people.

In conclusion, I feel that Linux does have the items needed for several types of "commercial" uses:

- stability and quality
- low variable costs for turnkey applications
- explosive growth in volume to attract ISVs

What Linux really needs is for the "commercial" community to understand what is going on, and to embrace it where it will be useful. This will increase the volume numbers even more, which will attract more applications.

Along these lines I would like to "advertise" a joint effort of USENIX and Linux International to happen in January of 1997 in Anaheim, California of the United States. There will be a joint USENIX/Linux development conference, and while a certain part of the Linux conference will be oriented towards the development of the Linux operating system, the bulk of the conference will be oriented towards application developers and marketing people, to better understand the Linux operating system and how to sell their applications and services into the Linux market. We hope to show ISVs, VARs, resellers and distributors how they can make money by selling their applications and services on top of the Linux operating system.

To join in this effort, please view http://www.usenix.org/linux.html and encourage your VARs, ISVs and resellers (or even yourself!!) to attend. We call the conference "USELINUX", and we hope that we can prove to people at that event that it is time to just USE LINUX.

6.4 Biography

Jon "maddog" Hall is a Senior Leader in the Digital Equipment Corporation UNIX group. He has been in the computer industry for twenty-five years, UNIX for sixteen years and has guided the emergence of six operating systems, including Alpha Linux. He has an MS in Computer Science.

7 USELINUX Conference

USELINUX: Linux Applications Development and Deployment Conference January 6-10, 1997 - Anaheim Marriott Hotel, Anaheim, California

Co-located with the USENIX Annual Technical Conference Co-sponsored by Linux International and the USENIX Association

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Suggestions for Topics:  June 1, 1996
Submissions  Due :  Date:  July 1, 1996
Materials Due Date:  November 13, 1996
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CONFERENCE CHAIR: Michael K. Johnson, Linux Journal

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TECHNICAL TRACK COMMITTEE:
Michael K. Johnson, Chair, Linux Journal
Mark Bolzern, WorkGroup Solutions
Alan Cox, 3Com Remote Access Products
Jon ``maddog'' Hall, Esq., Digital Equipment Corporation
Lorrie LeJeune, O'Reilly and Associates
Dr. Tom Miller, North Carolina State University
Erik Troan, Red Hat Software
Dr. Greg Wettstein, Roger Maris Cancer Center

BUSINESS TRACK COMMITTEE:
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Michael K. Johnson, Editor, Linux Journal
Lorrie LeJeune, O'Reilly and Associates
Bryan Sparks, President , Caldera, Inc.
Paul Winbauer, Director of Technical Programs, Avnet Computing
Bob Young, President, Red Hat Software, Inc.

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Tutorials:  January 6-7, 1997
Technical Sessions:  January 8-9, 1997
Business Sessions:  January 10, 1997
Keynote:  Wednesday, January 8, 1997
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Birds-of-a-Feather Sessions: January 7-9, 1997
Vendor Exhibits:  January 8-9, 1997
Reception: January 8, 1997
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7.1 Overview

The Linux Applications Development and Deployment Conference (USELINUX) is aimed at three primary audiences: application developers porting or developing Linux applications, systems administrators charged with maintaining Linux systems, and business people who wish to bring Linux applications to market. Two technical tracks on January 8th and 9th will include separate components for developers and systems administrators. A business track devoted to explaining the dynamics of the Linux marketplace and how to partake of it will take place on January 10.

In addition to the three days of presentations and discussions, there will be two days of tutorials, Birds-of-a-Feather sessions, and Vendor Exhibits.

7.2 Tutorials

We are actively seeking proposals for half or full day tutorials on practical, technical aspects of using Linux. If you would like to present a tutorial, please contact the USENIX tutorial co-ordinator, Daniel V. Klein.

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Phone: 412.421.0285
Fax: 412.421.2332
Email: <dvk@usenix.org>
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7.3 Technical track topics

The technical track will have three components:

- An application developers component focusing on topics helpful in porting and developing Linux applications. These include things like APIs, including both Linux's levels of compliance with industry standard APIs and Linux-specific APIs, and capabilities that give extra functionality and/or convenience.
- A system administrators component to help sysadmins apply their skills to Linux administration, and also demonstrate some of the unique and useful features that can make their lives easier.
- A component for enthusiasts involved in developing the Linux operating system and environment.

7.4 Business track topics

The business track program will focus on obstacles and challenges in integrating Linux into a business. The target audience are software application developers, hardware vendors, service providers, large in-house application developers, and others who would like to know how to make their business more successful using Linux. This track will concentrate on business issues such as:

- The Linux Market: Who, What, Where, When and Why?
- Application Portfolios: What is available, what can be done?
- Marketing to the Linux Marketplace
- Channels: Retail, Resellers, Distributors, Integrators, OEMs, Service
- Licenses and Licensing: I don't want to give away my application!!!

In addition to the meetings, there will be a compendium of information on CD-ROM for conference attendees. This will include copies of the slides, pointers to resources, white papers, lists of current resellers, user groups, etc.

7.5 How to submit a proposal

Suggestions for additional topics and areas where the topics can be expanded are welcome by June 1, 1996. The program committee will then prioritize the topics and create the final list of topics by July 1st. The program committee will solicit volunteers to work on the program, and will balance volunteers with program needs by that time.

An expanded electronic version of this announcement with greater detail, as well as the Call for Papers for the USENIX Annual Technical Conference, is available at the USENIX Web site at http://www.usenix.org.

Proposals for invited talks and panels should be received by July 1, 1996. We welcome submissions of a full paper or an extended abstract. Panel proposals should contain a list of names of potential panelists. Please send submissions to the conference program chairs via one of the following methods. All submissions will be acknowledged.

Please send comments, suggestions, and volunteering of time for a particular area of expertise (including a small bio of your experience) to the conference program chair via one of the following methods. Email is greatly preferred.

7.6 Preferred method

If you are submitting an idea for the technical track, send email to michael@usenix.org.

For the business program, send your ideas via email to maddog@usenix.org with the subject line:

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MADDOG, ANOTHER GREAT IDEA FOR THE *FABULOUS* USELINUX BUSINESS TRACK
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7.7 Alternative method

Via postal address or fax to:

Michael Johnson or Jon ``maddog'' Hall, Esq.
USENIX Association
2560 Ninth Street, Suite 215
Berkeley CA 94710
Fax: 510-548-5738

7.8 Vendor exhibits

Vendors will demonstrate their products in a relaxed environment where attendees can discuss product features and services.

Vendors are invited to participate in the Vendor Exhibits. This is an excellent opportunity to receive feedback from our technically astute audience. If your company would like to display its products or services, please contact Cynthia Deno:

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Phone:  408-335-9445
Email: <display@usenix.org>
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7.9 Birds-Of-a-Feather sessions (BOFs)

BOFs are very informal, attendee-organized sessions held in the evenings by attendees interested in a particular topic. They may be scheduled on-site or in advance by contacting the USENIX Conference Office. Send email to conference@usenix.org or phone 714-588-8649.

7.10 About the USENIX Association

USENIX is the UNIX and Advanced Computing Systems Technical and Professional Association. Since 1975 the USENIX Association has brought together the community of engineers, system administrators, scientists, and technicians working on the cutting edge of the computing world.

The USENIX Conferences have become the essential meeting grounds for the presentation and discussion of the most advanced information on new developments in all aspects of advanced computing systems.

The USENIX Association and its members are dedicated to:

- problem-solving with a practical bias,
- fostering innovation and research that works,
- communicating rapidly the results of both research and innovation,
- providing a neutral forum for the exercise of critical thought and the airing of technical issues.

SAGE, a Special Technical Group within the USENIX Association, is dedicated to the recognition and advancement of system administration as a profession. To join SAGE, you must be a member of USENIX.

7.11 About Linux International

Linux International was established to promote the development and use of Linux. The people at Linux International know how good Linux is and want it to become an accepted competitor to products from even the largest computer companies. Among other things, it serves as a bridge between the dedicated and skilled community of developers, and the general world of commerce and industry.

Linux International is a non-profit organization run by volunteers, many of whom are high-profile Linux developers or activists.

For more information, please visit Linux International's Web site at http://www.li.org or send mail to li@li.org.

7.12 Registration information

The complete program will be available in September 1996. To receive a registration package, please contact:

```
USENIX Conference Office
22672 Lambert Street, Suite 215
Lake Forest, CA  92630
Phone:  714.588.5738
Fax:  714.588.9706
URL:  http://www.usenix.org
Email:  conference@usenix.org
```

Or you can send email to our mailserver at info@usenix.org. Your message should contain the line: "send linux conferences" and the program will be sent to you.

8 Databases

8.1 Just Logic/SQL

Description:

Relational Database Management System

Distribution Media:

3 1/2" diskettes.

Licensing Policy:

Unlimited runtime included.

OS Provisions:

N/A

Documentation:

Printed manual, examples.

Product Support:

EMail, fax or phone.

Extra Features and Add-Ons:

- client-server option: lets run applications on several computers running Windows or Linux, that access a central database on a Linux system.
- web-enabling option: passthrough between an HTTP Web server and a Just Logic/SQL database. No C or Perl required. SQL commands are embedded directly within HTML files. Compatible with Netscape, Apache, NCSA and all other CGI-compliant HTTP servers.

Available Since:

1993.

Countries with Distribution:

World wide.

Price Range:

US$149-$395.

Vendor:

Just Logic Technologies

```
PO Box 63050, 40 Commerce St.
Nun's Island, Montreal, H3E 1V6
Canada
```

Phone:

(514) 761-6887

Fax:

(514) 642-6480

EMail:

sales@justlogic.com

Url:

http://www.justlogic.com

Contact:

Luc Vallieres

Last modified:

November 24, 1996.

8.2 SOLID Server

Description:

SOLID Server is a database engine for new applications and products. It is extremely easy to set up, and has a small footprint. SOLID Server is standards-compliant and full of power. It is perfectly suited for distributed use in countless copies. Its maintenance is care-free, requiring minimal or no administrator attention.

Distribution Media:

Diskettes, WWW and FTP.

Licensing Policy:

Copy-protected.

OS Provisions:

At least 2 MB RAM, recommended are 8 MB; harddisk about 3-4 MB.

Documentation:

English manuals and online help. WWW.

Product Support:

Available.

Extra Features and Add-Ons:

N/A

Available Since:

1994.

Countries with Distribution:

World wide.

Price Range:

SOLID Desktop US$99, SOLID Workgroup US$199/seat.

Vendor:

Solid Information Technology Ltd

```
Huovitie 3
FIN-00400 Helsinki
Finland
```

Phone:

+358-9-477 4730

Fax:

+358-0-577 242

EMail:

info@solidtech.com

Url:

http://www.solidtech.com

Last modified:

October 11, 1996.

8.3 Yard SQL

Description:

The YARD company offers 4 SQL products as follows:

- YARD-SQL – Relational SQL client/server database with compliance to X/Open XPG4 and ANSI SQL 92 including network support for accessing remote databases
- YARD-ESQLC – Embedded SQL for C
- YARD-ODBC – ODBC interface for MS Windows clients
- YARD-X – Motif client for database access (No development tool)

Distribution Media:

Floppy disk and streamer tapes.

Licensing Policy:

License number and activation key for each product and installation with user dependent licenses. A Private Edition (limited to 1 user and 5 MB database) for non commercial private use and for evaluation is available on ftp://ftp.yard.de.

OS Provisions:

Linux 1.2.13 and all following ELF versions; Motif 1.2.3; RAM usage: 1 MB (minimum) for Shared Memory, 500 KB per User; disk usage: YARD-SQL 10 MB, YARD-ESQLC 1 MB, YARD-ODBC 1.5 MB, YARD-NET 1 MB, YARD-X 5 MB.

Documentation:

Printed 600 pages reference and users guide in German. English documentation is available only as PostScript file.

Product Support:

```
Without maintenance agreement:
        Release Update: 35% of regular price
        Version Update: 65% of regular price
With maintenance agreement:
        Release Update: free
        Version Update: 30% of regular price
Maintenance agreement:
        25% of turnover, DM 1200 minimum
```

Extra Features and Add-Ons:

All products also available for other widely distributed Unix systems (e.g. SCO UNIX, SPARC Solaris, IBM, HP, SGI).

Available Since:

January, 1994.

Countries with Distribution:

Current worldwide distribution through Distributor Ordix Software <info@ordix.de>, Paderborn, Germany.

Price Range:

```
Prices specified are for the Linux platform

YARD-SQL       DM 690,00 (1 user), DM 170,00 any additional user
YARD-ESQLC     DM 490,00 (1 user), DM 90,00 any additional user
YARD-ODBC      DM 390,00 (1 PC)
YARD-X         DM 490,00 (1 user), DM 190,00 any additional user
```

Vendor:

YARD Software GmbH

```
Hansestr. 99
D-51149 K\"{o}ln
Germany
```

Phone:

+49 (0) 221/98664-0

Fax:

+49 (0)221/98664-99

EMail:

yard@yard.de

Url:

http://www.yard.de

FTP:

ftp://ftp.yard.de

Contact:

Thomas Schonhoven <thomass@yard.de>

Last modified:

October 7, 1996.

9 Data Visualisation, CAD

CAD tools, renderers, OCR software, etc.

9.1 IDL

Description:

IDL is the pioneering software for data analysis, visualization, and application development. IDL's features include flexible I/O, 2D plotting, 3D graphics, volume rendering, image processing, mathematics, statistics, a cross-platform GUI toolkit, plus a high-level, array-oriented programming language. Use IDL for visual data analysis, rapid prototyping, or application development. IDL programs are portable across Linux, Windows 3.1, Windows 95, Windows NT, Mac, PowerMac, UNIX and VMS.

Distribution Media:

CD-ROM and anonymous FTP.

Licensing Policy:

Free demo CD-ROM available or download via ftp.

OS Provisions:

IDL supports linux kernel version 1.2.8 dynamically linked using Slackware 2.3. Statically linked version also included for use with Linux versions less than 1.2.8. 16 MB RAM minimum recommended. 50 MB disk space.

Documentation:

1600+ pages of documentation on paper and hypertext on-line help.

Product Support:

Customer support service, maintenance/update service, training and consulting are available. In addition, a Usenet group is devoted to IDL.

Extra Features and Add-Ons:

HDF support, animation, volume slicer, high resolution mapping built-in.

Available Since:

September, 1995.

Countries with Distribution:

Ask vendor.

Price Range:

Contact vendor/distributor.

Vendor:

Research Systems, Inc.

```
2995 Wilderness Place
Boulder, CO
U.S.A.
```

Phone:

+1 (303) 786-9900

Fax:

+1 (303) 786-9909

EMail:

info@rsinc.com

Url:

http://www.rsinc.com

Contact:

Andrea Bevis

Last modified:

October 7, 1996.

9.2 Megahedron

Description:

A flexible and powerful 3D graphics engine controlled by a high-level interpreted language called SMPL. With it, you can learn about 3D, write your own interactive simulations, animations, and ray-tracings. You can even write your own shaders, customize procedural objects and motions, and use up to 64 computers at once for net rendering. Includes executables for Windows 95, Windows NT x86 and Alpha, SGI Irix and Linux.

Distribution Media:

CD-ROM, ISO-9660 and Rock Ridge.

Licensing Policy:

Very flexible. The owner is allowed to run as many copies as they can, on any platforms. Demo version, full documentation and sample images and scripts available on our web site.

OS Provisions:

Supports kernel 1.2.8 or 1.3.15. Non-ELF, a.out executable (QMAGIC). 16 MB of RAM minimum recommended. 7 MB free disk space recommended.

Documentation:

In HTML on CDROM.

Product Support:

Private news server, EMail.

Extra Features and Add-Ons:

Everything included on one CD-ROM.

Available Since:

August 1996.

Countries with Distribution:

World wide, direct and through dealers.

Price Range:

US$99

Vendor:

Syndesis Corporation

```
235 South Main Street
Jefferson, WI 53549
U.S.A.
```

Phone:

(414) 674-5200

Fax:

(414) 674-6363

EMail:

syndesis@threedee.com

Url:

http://www.threedee.com

Contact:

John Foust <jfoust@threedee.com>

Last modified:

October 5, 1996.

9.3 Tecplot 7.0

Description:

Tecplot is a plotting program for visualizing and analyzing engineering and scientific data. Tecplot supports XY, 2D, 3D-surface, and 3D volumetric plotting. With Tecplot you don't have to write a program, just input your data and start visualizing immediately. For more information, see the Amtec Engineering home page.

Distribution Media:

Anonymous FTP, CD-ROM. Additional media types for extra charge.

Licensing Policy:

Either personal licenses (node locked) or network licenses. Evaluation copies available on CD-ROM or by anonymous FTP.

OS Provisions:

12 MB minimum, Linux 2.0 or better, currently requires Motif 2.0 libraries on user system. 32MB ram is recommended.

Documentation:

Printed User's and Reference Manuals, full online help. English.

Product Support:

Update and technical support included with license for first three months. Extra charge (ask for EUSS) after that. Training courses available.

Extra Features and Add-Ons:

N/A

Available Since:

V7 since September 1996, V6 since August 1993.

Countries with Distribution:

Many, see Amtec home page.

Price Range:

US$1795 for personal license, US$2395 for single-user network license, US$1795 for each additional user. All prices the U.S.A. and Canada only.

Vendor:

Amtec Engineering, Inc

```
PO Box 3633
Bellevue, WA 98009-3633
U.S.A.
```

Phone:

206-827-3304 (800-676-7568 in US/Canada

Fax:

206-827-3989

EMail:

tecplot@amtec.com

Url:

http://www.amtec.com

Last modified:

October 8, 1996.

9.4 XVScan

Description:

Image scanning and manipulation software for HP ScanJet scanners.

Distribution Media:

FTP or EMail preferred. 4mm DDS2 DAT tape or floppies (additional US$15 in the U.S.A., US$25 international).

Licensing Policy:

XVScan is based on XV and is not available in demo version due to licensing restrictions. Distributed with full source code.

OS Provisions:

Linux, tested with 1.2.x and 2.0.x, requires a recent generic SCSI driver support to be built in (no earlier than 1.1.79). Motif is not required. Any XFree version (X11R5, X11R6).

Documentation:

Online, WWW, English.

Product Support:

Updates free for first year.

Extra Features and Add-Ons:

Also available for HP-UX, BSD/OS 2.2 and 3.0 and FreeBSD.

Available Since:

May, 1995.

Countries with Distribution:

Worldwide.

Price Range:

US$50 for FTP or EMail shipping. Additional US$15 for media in the United States, US$25, internationally. Mastercard, Visa and Discover Credit Cards accepted.

Vendor:

tummy.com, ltd.

```
#807 300 S 16th Street
Omaha, NE 68102
U.S.A.
```

Phone:

(402) 344-4426

Fax:

(402) 341-7119

EMail:

xvscan@tummy.com

Url:

http://www.tummy.com/xvscan

Contact:

Sean Reifschneider <jafo@tummy.com> or Evelyn Mitchell <efm@tummy.com>

Last modified:

October 5, 1996.

10 Development tools

Compilers, development environments and so on.

10.1 Amzi! Prolog & Logic Server

Description:

Full-featured, Edinburgh-standard (no data typing) system for embedding Prolog rule-based modules in C/C++ and other languages. Includes: compiler, listener, debugger, linker, EXE generator, and call-in/call-out Logic Server API.

Distribution Media:

3.5" diskettes.

Licensing Policy:

The Professional Edition includes an unlimited, royalty-free license. The Personal Edition is limited to distributing applications for non-commercial use only.

OS Provisions:

About 250KB RAM for typical small application, 3-4MB disk.

Documentation:

Printed 250pp manual. Various technotes on disk.

Product Support:

Subscription Plus service provides automatic updates for a full year, $150. Custom development services available.

Linux Support:

No Linux system included. For Amzi! software, free tech support for registered users by phone, fax and EMail.

Extra Features and Add-Ons:

N/A

Available Since:

November 3, 1995.

Countries with Distribution:

World wide.

Price Range:

Personal, $98. Professional, $298.

Vendor:

Amzi! inc.

```
40 Samuel Prescott Drive
Stow, MA 01775
U.S.A.
```

Phone:

+1 508 897 7332

Fax:

+1 508 897 2784

EMail:

info@amzi.com

Url:

http://www.amzi.com

Contact:

Mary Kroening

Last modified:

October 30, 1996.

10.2 Basmark QuickBASIC

Description:

The Basmark QuickBASIC Compiler is a multi-user IBM-PC BASICA, MBASIC and Microsoft QuickBASIC Compiler designed to provide performance and consistency across a variety of machines (e.g. i386 and i486, Pentium, SPARC, RS/6000, HP PA-Risc) under Unix, AIX, SunOS, Linux, HP-UX, Xenix.

Distribution Media:

3.5" diskette

Licensing Policy:

Per machine, no run-time restrictions.

OS Provisions:

GNU GAS and LD must be installed.

Documentation:

400+ page manual, release and installation notes.

Product Support:

Updates available for US$39 less shipping. Maintenance contracts available.

Extra Features and Add-Ons:

C-ISAM (Informix Inc.) Interface in C source code form. Cost US$35.

Available Since:

December 1993.

Countries with Distribution:

To purchase from manufacturer directly.

Price Range:

US$195 (less shipping)

Vendor:

Basmark Corporation

```
P.O. Box 40450
Cleveland, OH 44140
U.S.A.
```

Phone:

+1 (216) 871-8855

Fax:

+1 (216) 871-9011

EMail:

jgo@basmark.com (for orders)

Url:

http://www.XBasic.com

Contact:

Joseph O'Toole (for orders)

Last modified:

October 5, 1996.

10.3 Dynace

Description:

Dynace (pronounced like "dynasty" without the "t") is a preprocessor, include files and a library which extends the C language with advanced object oriented capabilities, automatic garbage collection and multiple threads. Dynace is designed to solve many of the problems associated with C++ while being easier to learn and containing more flexable object oriented facilities. Dynace is able to add facilities previously only available in languages such as Smalltalk and CLOS without all the overhead normally associated with those environments.

Distribution Media:

Full C source at http://www.edge.net/algorithms

Licensing Policy:

One license per programmer; Applications are royalty free. Information and demo on http://www.edge.net/algorithms.

OS Provisions:

Any Linux, any Unix, any Windows and DOS.

Documentation:

310 pages printed.

Product Support:

Dynace-support@edge.net

Extra Features and Add-Ons:

Complete Windows development system.

Available Since:

December 1993.

Countries with Distribution:

N/A

Price Range:

US$599.

Vendor:

Algorithms Corporation

```
3020 Liberty Hills Drive
Franklin, TN 37067
U.S.A.
```

Phone:

+1 (800) 566-8991 or +1 (615) 791-1636

Fax:

+1 (516) 791-7736

EMail:

blake@edge.net

Url:

http://www.edge.net/algorithms

Contact:

Blake McBride

Last modified:

October 5, 1996.

10.4 Finesse

Description:

OSF/Motif GUI for shell scripts.

Distribution Media:

Free full featured developer version available via FTP.

Licensing Policy:

Finesse is a fully commercial product for other Unixes where nodelocked licenses are possible. The Linux version is freely available via FTP. Floppy medium is DM 90.

OS Provisions:

ELF Libraries. X11R6. No Motif required.

Documentation:

PostScript File.

Product Support:

No support for free version.

Extra Features and Add-Ons:

Not appropriate.

Available Since:

Linux version since May 1995.

Countries with Distribution:

World wide.

Price Range:

Free demo. Commercial version with support on request.

Vendor:

science + computing GmbH

```
Hagellocher Weg 71
D-72070 T\"{u}bingen
Germany
```

Phone:

+49 (0) 7071/9457-0

Fax:

+49 (0) 7071/9457-27

EMail:

info@science-computing.uni-tuebingen.de

Url:

http://www.science-computing.uni-tuebingen.de

Contact:

Olaf Flebbe

Last modified:

October 9, 1996.

10.5 Insure++

Description:

Runtime Error Detection Tool.

Distribution Media:

CD-ROM, FTP, tapes.

Licensing Policy:

Machine licenses or floating network license.

OS Provisions:

SunOS, HP, IBM AIX, SGI, SCO, Linux.

Documentation:

v3.0.1.

Product Support:

N/A

Extra Features and Add-Ons:

TCA (coverage analysis), Inuse (memory monitor).

Available Since:

1993.

Countries with Distribution:

Japan, Korea, Germany, UK, France, Australia, Spain, Italy, Scandinavia

Price Range:

Starts at US$1995.

Vendor:

ParaSoft Corporation

```
2031 S. Myrtle Ave.
Monrovia, CA 91016
U.S.A.
```

Phone:

(818) 305-0041

Fax:

(818) 305-9048

EMail:

info@parasoft.com

Url:

http://www.parasoft.com

Contact:

Joe Valdez

Last modified:

October 22, 1996.

10.6 INTERACTER

Description:

INTERACTER is a portable user-interface and graphics subroutine library for Fortran software developers. INTERACTER-based programs are portable to a wide range of Fortran compilers running on Unix, VMS, Windows, DOS and OS/2. The Linux version supports f2c and g77 (a.out and ELF) and Absoft f77 (ELF). Functions include menus, text windows, forms, graphics primitives, presentation graphics, hardcopy (many formats) and operating system interface.

Distribution Media:

3.5" tar diskettes or 4mm DAT.

Licensing Policy:

INTERACTER-based programs can be distributed royalty free. Linux demo program available at http://www.demon.co.uk/issltd.

OS Provisions:

Linux version supports X Windows (via Xlib), graphics terminals or Linux console (colour text-mode). Requires g77, f2c or Absoft f77.

Documentation:

Two-volume English language printed manual.

Product Support:

Free lifetime technical support. New releases every six months. Chargeable software updates.

Extra Features and Add-Ons:

Optional INTERACTER Toolkit provides form designer, graphics file viewer, on-line help, hardcopy post-processor and set-up file editor.

Available Since:

October, 1995.

Countries with Distribution:

Distributors in North America, Europe and Australia.

Price Range:

Linux version: US$675 (UK £450).

Vendor:

Interactive Software Services Ltd.

```
Westwood House
Littleton Drive
Huntington
Staffs WS12 4TS
United Kingdom
```

Phone:

+44 (0) 1543 503611

Fax:

+44 (0) 1543 574566

EMail:

support@issltd.demon.co.uk

Url:

http://www.demon.co.uk/issltd

Last modified:

October 8, 1996.

10.7 Metacard

Description:

MetaCard is a GUI development and multimedia authoring tool compatible with Apple Corporation's HyperCard. Anyone can use MetaCard to build GUI applications and hypermedia documents using a powerful, direct manipulation editor and an easy-to-learn scripting language.

MetaCard goes beyond HyperCard by including support for color controls and images, vector graphics, scrollbars, and dialog boxes. MetaCard's scripting language has support for arrays, custom (user defined) object properties, and is based on high-perforance "virtual compiler" technology. Stacks developed with MetaCard are portable among all popular Unix platforms and Windows 95/NT and can be distributed with without licensing fees or royalties.

Distribution Media:

Anonymous FTP and 3.5" diskettes.

Licensing Policy:

MetaCard can be licensed to a single, named individual, but can be used on any machine or combination of machines by that user. Multiple user packages are also available.

The save-disabled distribution is available via anonymous FTP from ftp://ftp.metacard.com/MetaCard and ftp://ftp.uu.net/vendor/MetaCard.

OS Provisions:

The Linux engine is build on a 1.2.13 ELF system. Minumum 8 MB RAM for runtime, 16MB RAM for development. Minimum 640x480x8 screen resolution for runtime, 800x600x8 for development. Development system requires about 5MB disk space. GUI is Motif-compliant, but does not require Motif libraries.

Documentation:

Complete online documentation is supplied. Printed documentation is an extra-cost option.

Product Support:

Free EMail technical support, phone support available at extra cost.

Extra Features and Add-Ons:

A library version of MetaCard that can be linked directly to C programs (Embedded MetaCard) is available at extra cost.

Available Since:

June 1992.

Countries with Distribution:

Direct sales world wide.

Price Range:

US$995 for single-user all-platform development license.

Vendor:

MetaCard Corporation

```
4710 Shoup pl.
Boulder, CO 80303
U.S.A.
```

Phone:

+1 (303) 447-3936

Fax:

+1 (303) 499-9855

EMail:

info@metacard.com

Url:

http://www.metacard.com

Last modified:

October 5, 1996.

10.8 Webthreads

Description:

Webthreads is a very lightweight browser and server independent CGI script package, developed under Linux, that adds state and an extremely fast HTML scripting extension called "iHTML" that enables web designers to build sites that react one on one with visitors. In addition, the CGI interface has been expanded to enable parameter passing on a per visitor basis between scripts running on different pages.

Distribution Media:

WWW

Licensing Policy:

30 Day fully functional eval available from http://www.webthreads.com

OS Provisions:

Any version of Linux on x86, a.out and ELF.

Documentation:

Web site and on-line provided with the package.

Product Support:

EMail support.

Extra Features and Add-Ons:

Msql interface. Registration site management addition.

Available Since:

June, 1996.

Countries with Distribution:

World wide.

Price Range:

US$895 per license.

Vendor:

Webthreads, L.L.C.

```
1919 Gallows Road, 10th floor,
Vienna, VA 22182
U.S.A.
```

Phone:

703-848-9027

Fax:

703-848-2444

EMail:

info@webthreads.com

Url:

http://www.webthreads.com

Contact:

Gavin Suttcliffe

Last modified:

November 6, 1996.

10.9 SEDIT, S/REXX

Description:

SEDIT is a powerful UNIX (tm) text editor patterned after IBM's XEDIT editor. It operates with a GUI under X windows or in character mode from a tty device. S/REXX is a full UNIX implementation of IBM's SAA procedural language except that the numeric digit specification is limited to 15 digits. S/REXX functions as an imbedded macro langauge for SEDIT as well as providing a powerful modern programming language alternative to shell scripting languages. SEDIT and S/REXX may be purchased in a bundle or individually. See http://www.sedit.com for more information including introductory pricing for Linux, etc. For additional information, please contact one of the local distributors listed on the web site or mail us at sedit@dialup.FranceNet.fr

Distribution Media:

The Linux version is available for ftp download or on diskettes.

Licensing Policy:

SEDIT and S/REXX are licensed products. See the above WWW site for details. For demo purposes, a short term license key will be provided on request to anyone who obtains the product via ftp.

OS Provisions:

We believe these products will work with any recent stable Linux kernel since 1.1.49. Motif is fully bound with SEDIT and SEDIT is distributed with XFree86 3.1 shared libraries for use if your system is not at that level.

Documentation:

Documentation is furnished in PostScript form, in extensive on-line help files, and in optional printed manuals.

Product Support:

Technical support is available for all licensed users. For maintenance, see the above URLs.

Extra Features and Add-Ons:

A REXX interactive graphical debugger is available as an optional feature as are printed manuals, physical media, and on going maintenance. See the above URLs.

Available Since:

The original Linux version has been available since 3rd quarter 1995.

Countries with Distribution:

SEDIT and S/REXX are available worldwide. The URLs should be consulted for current information.

Price Range:

Pricing information should be requested from the local distributor responsible for your country. An economical 2 user license is available for Linux without media or printed documentation with other options for more users, S/REXX, hardcopy manuals, etc.

Vendor:

Benaroya

```
31 Rue de Constantinople
F-75008 Paris
France
```

Phone:

+33 1 47 22 22 13

Fax:

+33 1 47 22 06 17

EMail:

sedit@dialup.FranceNet.fr

Url:

http://www.sedit.com

Contact:

Robert Benaroya

Last modified:

September 28, 1996.

10.10 XBasic

Description:

XBasic is a comprehensive visual program development environment that integrates a powerful editor, advanced 32/64-bit BASIC compiler, debugger, GuiDesigner and GraphicsDesigner. XBasic is written entirely in XBasic and is available for Linux/Intel, Windows 95, Windows NT and SCO Unix.

Distribution Media:

Either 3.5" diskettes or via Internet/FTP.

Licensing Policy:

Each copy is licensed on a per machine basis.

OS Provisions:

Linux (ELF 1.2.13 or higher).

Documentation:

300+ page (8.5 inches by 11 inches) manual.

Product Support:

US$3 per minute, 15 minute minimum.

Extra Features and Add-Ons:

Enterprise (socketized internet-TCP/IP) edition is available.

Available Since:

January 1996.

Countries with Distribution:

Not specified.

Price Range:

US$795-$955

Vendor:

Basmark Corporation

```
P.O. Box 40450
Cleveland, OH 44140
U.S.A.
```

Phone:

216-871-8855

Fax:

216-871-9011

EMail:

jgo@basmark.com

Url:

http://www.basmark.com

Contact:

Joseph G. O'Toole

Last modified:

October 6, 1996.

11 Financial Software

All about financial tools.

11.1 BB Stock Pro and BB Stock Tool

Description:

BB Stock Pro and BB Stock Tool are powerful stock tracker and analysis tools. Features include charting, technical analysis, portfolio management, customized alert, automatic stock split detection, personalized watch list, auto run and profit test.

Distribution Media:

WWW or FTP download.

Licensing Policy:

Per machine license. Free evaluation version is available at http://www.falkor.com

OS Provisions:

Linux 1.2, gcc 2.6.3 or later.

Documentation:

Online help and PostScript document.

Product Support:

Free technical support. Frequently asked questions and answers available at WWW.

Extra Features and Add-Ons:

N/A

Available Since:

Sun SPARC version available since December 1993. Linux version available since April 1995.

Countries with Distribution:

USA, Canada, Sweden, Germany, Singapore, Malaysia, Taiwan.

Price Range:

Linux version is US$99.

Vendor:

Falkor Technologies

```
P.O.Box 14201
Fremont, CA 94539
U.S.A.
```

Phone:

+1 (510) 505-0700

Fax:

None

EMail:

skyline@falkor.com

Url:

http://www.falkor.com

Contact:

Henry Chen

Last modified:

October 9, 1996.

11.2 TimeClock v1.07

Description:

Employee time and attendance package for small to medium sized businesses. Includes custom report module, interface to barcode/magnetic card readers (Employee ID), and data export module.

Distribution Media:

3 1/2 inch and 5 1/4 inch diskettes.

Licensing Policy:

One CPU, unlimited users.

OS Provisions:

N/A

Documentation:

Printed manual and on-line HTML manual included with software.

Product Support:

Free, usually 20 minute response time.

Extra Features and Add-Ons:

Barcode/magnetic card interface.

Available Since:

1992 XENIX and MS-DOS version, 1994 AIX version, October 1996 Linux version.

Countries with Distribution:

U.S.A.

Price Range:

US$699

Vendor:

Quality Software Solutions, Inc.

```
1322 Dodds Ave.
Chattanooga, TN 37404
U.S.A.
```

Phone:

423-821-5757

Fax:

423-629-0744

EMail:

dbryson@tclock.com

Url:

http://www.tclock.com

Contact:

Donald Bryson

Last modified:

October 11, 1996.

12 Mathematics

12.1 Maple V

Description:

Maple V Release 3 is a powerful general purpose computer algebra system. Maple V is a system for solving mathematical problems symbolically (instead of using paper and pencil and a lot of time) and numerically. Maple V's graphics (various types of 2D, 3D, animation) visualizes the solutions. Maple V has also a programming language (Pascal like) which allows to extend the library of 2500+ functions.

Distribution Media:

3.5" disks.

Licensing Policy:

License for unlimited use in time of the bought version, floating license with user based pricing.

OS Provisions:

Linux kernel 1.0; XFree86 or Motif possible but not necessary; release number 2100: at least 8 MByte RAM suggested.

Documentation:

3 books ("First Leaves: A Tutorial Introduction" 253 pgs., "Language Reference Manual", 267 pgs. and "The Maple Handbook" 497 pgs.), Installation Manual. Manual pages of all functions and commands, help browser, keyword search. Documentation and help in English, some books in various languages exist.

Product Support:

Updates/maintenance depending on license, please call the distributor or WMSI.

Extra Features and Add-Ons:

Share library via EMail and FTP. Free mailing list available (maple_group@daisy.waterloo.edu).

Available Since:

September, 1994.

Countries with Distribution:

US/Canada, Europe, Asia

Price Range:

N/A

Vendor:

Waterloo Maple Software

```
450 Phillip Street
Waterloo, Ontario
Canada N2L 5J2
```

Phone:

+1 (519) 747-2373

Fax:

+1 (519) 747-5284

EMail:

info@maplesoft.com

Vendor in Germany:

Scientific Computers GmbH

```
Franzstr. 106
D-52064 Aachen
Germany
```

Phone:

+49 (0)241/47075

Fax:

+49 (0)241/44983

EMail:

maple@scientific.de

Contact:

Andreas Himmeldorf

Last modified:

October 30, 1996.

12.2 MATCOM and MATCOM MATH LIBRARY

Description:

MATLAB is a Matlab to C++ compiler and C++ MATRIX MATH LIBRARY. MATCOM compiles Matlab source files (M-Files) to C++ source code. The resulting code is linked with the supplied C++ Matrix class library to create standalone executables or MEX files.

The C++ code and library can be integrated in products, royalty free, saving the need to translate the algorithm prototype.

Compiled code runs significantly faster than the original interpreted source.

Matrices of doubles, floats, ints and chars are supported, providing lower memory usage for many applications, especially Signal and Image Processing.

MS Windows and many Unix platform are supported with a variety of C++ compilers. Evaluation version (fully functional, 30 days limited) is available for free download from our web site.

Distribution Media:

WWW only.

Licensing Policy:

From single license to site license. Contact The MathTools for details.

OS Provisions:

Linux 1.2, gcc 2.6.3 or later, 8 MB RAM, 15 MB on disk.

Documentation:

Users manual and Library Reference in various formats (MS Word, MS Write, plain text, PostScript)

Product Support:

A Fast product support is given by email only. The support section in the WWW page give immediate access to a wealth of resources, technical support, answers to frequently asked questions, technical documents and more.

Extra Features and Add-Ons:

N/A

Available Since:

May 1995.

Countries with Distribution:

Through our web site.

Price Range:

Upon request.

Vendor:

MathTools, Ltd.

```
P.O.Box 855
Horsham, PA 19044-0855
U.S.A.
```

Phone:

None

Fax:

1-888-MATHTOOLS, 1-215-957-1719

EMail:

info@mathtools.com

Url:

http://www.mathtools.com

Contact:

Ophir Herbst

Last modified:

October 7, 1996.

12.3 Matlab and Simulink

Description:

MATLAB is a high-performance, interactive numeric computation and visualization environment that combines the advantages of hundreds of packaged advanced math and graphics functions with a high-level language.

SIMULINK is a powerful, interactive software package for modeling, analyzing, and simulating dynamic nonlinear systems.

Distribution Media:

CD-ROM.

Licensing Policy:

SiteID-Locked - Contact The MathWorks for details.

OS Provisions:

Linux 1.2, 16 MB RAM, 20 MB disk space.

Documentation:

Printed documentation, online help, MATLAB Reference Guide (HTML)

Product Support:

The MathWorks supports a variety of Internet-based services to provide product information and services 24 hours a day. These services give immediate access to a wealth of resources, product data sheets, technical support, answers to frequently asked questions, user-contributed materials, open-forum discussions, and more.

Extra Features and Add-Ons:

Toolboxes: Fuzzy Logic, Signal Processing, Image Processing, Spline, Symbolic Math, Neural Network, Nonlinear Control Design, Control System, Robust Control, Mu-Analysis & Synthesis, System Identification, Optimization, Statistics, Real-Time Workshop. Blocksets: Fixed-Point Blockset, DSP Blockset.

Available Since:

June 1995.

Countries with Distribution:

Spain, Portugal, United Kingdom, Belgium, the Netherlands, Luxembourg, Australia, Switzerland, Japan, Taiwan, Korea, Israel, Poland, Germany, France, Italy, Austria.

Price Range:

Upon request.

Vendor:

The MathWorks, Inc.

```
24 Prime Park Way
Natick, MA 01760
U.S.A.
```

Phone:

+1 (508) 647-7000 x7322

Fax:

+1 (508) 647-7002

EMail:

efroio@mathworks.com, brian@mathworks.com

Url:

http://www.mathworks.com

Contact:

Enza Froio (Marketing), Brian Bourgault (Technical)

Last modified:

October 9, 1996.

13 Network Management

13.1 Venus

Description:

Venus is an distributed administration tool for any network built of Unix workstations from different hardware vendors. A Venus network presents itselfs to the user as a homogeneous computer system and guarantees transparent access to any network resource. It provides software tools for major cluster management tasks: configuration management, software distribution, user and filesystem administration.

Distribution Media:

N/A

Licensing Policy:

Commercial.

OS Provisions:

Currently build on top of the S.u.S.E distribution.

Documentation:

Printed doumentation, online help.

Product Support:

Hotline, EMail, courses ... upon request.

Extra Features and Add-Ons:

N/A

Available Since:

1994.

Countries with Distribution:

World wide.

Price Range:

Upon request. Special prices for educational institutions.

Vendor:

science + computing GmbH

```
Hagellocher Weg 71
D-72070 T\"{u}bingen
Germany
```

Phone:

+49 (0) 7071/9457-0

Fax:

+49 (0) 7071/9457-27

EMail:

info@science-computing.uni-tuebingen.de

Url:

http://www.science-computing.uni-tuebingen.de

Contact:

Olaf Flebbe

Last modified:

October 9, 1996.

14 X Windows related products

Alternative X Windows servers, widget sets, window managers.

14.1 BXwidgets

Description:

BXwidgets is a supplementary widget set to develop especially commercial Motif applications. It includes special widgets for tabulars, masks, formatted input field and the full support for a complete help system. All has Motif look and feel and is platform independent.

Distribution Media:

3,5" DOS diskette.

Licensing Policy:

Source code licence.

OS Provisions:

Any kernel, X11R5 or X11R6, Motif 1.1 or Motif 1.2.

Documentation:

About 250 pages of documenation with examples. Several demo programs.

Product Support:

Support and update service is available (DM 1200 or about US$750)

Extra Features and Add-Ons:

N/A

Available Since:

1992.

Countries with Distribution:

Germany, UK, USA.

Price Range:

DM 1600 (about US$1000) for a full source code licence.

Vendor:

BREDEX GmbH

```
Fallersleber-Tor-Wall 23
D - 38100 Braunschweig
Germany
```

Phone:

+49 / 531 / 24 33 0 - 0

Fax:

+49 / 531 / 24 33 0 - 99

EMail:

info@bredex.de

Url:

http://www.bredex.de

Last modified:

October 8, 1996.

14.2 BXwidgets/DB

Description:

BXwidgets/DB is a supplementary widget set to access relational databases. Data can be automatically queried form the database, displayed in various forms, changed and stored in the database. All applications built with BXwidgets/DB are database independent. The database access is performed by transaction-servers. Transaction-Server and database may reside on other hotsts in the network.

Distribution Media:

CD-ROM.

Licensing Policy:

Per OS License, no run-time restrictions, Evaluation-License available.

OS Provisions:

X11R5 and Motif1.2 must be installed.

Documentation:

Printed manual in English.

Product Support:

Support and update service is available.

Extra Features and Add-Ons:

Available Since:

1996.

Countries with Distribution:

N/A

Price Range:

DM 4900.

Vendor:

BREDEX GmbH

```
Fallersleber-Tor-Wall 23
D - 38100 Braunschweig
Germany
```

Phone:

+49 / 531 / 24 33 0 - 0

Fax:

+49 / 531 / 24 33 0 - 99

EMail:

info@bredex.de

Url:

http://www.bredex.de

Last modified:

October 8, 1996.

14.3 X Inside X Servers

Description:

Commercial grade X display Server for Linux. Complete, accelerated support for over 420 different graphics adapters including the latest from ATI, Diamond, Matrox, Number 9 and more. Easy menu driven install and setup. Browse http://www.xinside.com for the latest support information. Many popular extensions like PEX, XIE are included.

Distribution Media:

High density floppy diskette.

Licensing Policy:

Per cpu license.

OS Provisions:

No known problems with any Linux distribution. Requires around 5 MB hard disk.

Documentation:

100 page perfect bound installation manual and user guide included with server.

Product Support:

Installation support included via EMail, web, phone or fax.

Extra Features and Add-Ons:

N/A

Available Since:

1994.

Countries with Distribution:

World wide.

Price Range:

Contact your local reseller.

Vendor:

X Inside Incorporated

```
1801 Broadway, Suite 1710
Denver, CO 80202
U.S.A.
```

Phone:

+1.303.298.7478

Fax:

+1.303.298.1406

EMail:

info@xinside.com

Url:

http://www.xinside.com

Last modified:

October 9, 1996.

15 Other Software

Everything else that does not fit in one of the other sections by now.

15.1 Executor 2

Description:

Executor 2 reads and writes Macintosh formatted media and runs many Macintosh programs. A compatibility database is available from http://www.ardi.com.

Distribution Media:

CD-ROM

Licensing Policy:

Commercial software with a time limited crippled demo available from ftp://ftp.ardi.com or http://www.ardi.com.

OS Provisions:

DOS 6.x, Windows 3.1.x, Windows 95, Windows NT 4.x, OS/2 Warp, Linux/X/a.out, Linux/X/ELF, Linux/SVGA/a.out, Linux/SVGA/ELF.

Documentation:

30 page mini-manual in CD-ROM jewel-box case.

Product Support:

N/A

Extra Features and Add-Ons:

Each Executor 2 CD-ROM contains Executor/DOS and Executor/Linux. You can switch between them, but are allowed to only run one at a time.

Available Since:

N/A

Countries with Distribution:

N/A

Price Range:

Suggested Retail: US$249. Educational Institutions: US$149, Full-time Students: US$65.

Vendor:

ARDI

```
Suite 4-101
1650 University Blvd., NE
Albuquerque, NM 87102
U.S.A.
```

Phone:

+1 505 766 9115

Fax:

+1 505 766 5153

EMail:

questions@ardi.com

Url:

http://www.ardi.com

Contact:

N/A

Last modified:

November 24, 1996.

15.2 Aladdin Ghostscript

Description:

PostScript, PDF, PCL5e (1Q97), PCL5c (2Q97), and PCL XL interpreter. Provides X Windows previewing, conversion to half a dozen raster file formats, and output to dozens of printers. Runs in all OS environments, not just Linux, and on any processor (32- or 64-bit) with a C compiler. Can drive black-and-white, RGB, and CMYK devices, both bilevel and continuous-tone. For more information, see http://www.cs.wisc.edu/~ghost/index.html. Note that Aladdin Ghostscript is an OEM product only: end-user licensing is not available (and not necessary, since the product is free for end users), nor is end-user support.

Distribution Media:

1.44MB, 3.5" DOS diskettes.

Licensing Policy:

Normally per-CPU. License normally includes source code, upgrades, and support.

OS Provisions:

X11R5 or later is required for X Windows previewing. OS-specific modules are available for Unix (including Linux), VMS, MS Windows (including Windows NT), OS/2, and Macintosh. Porting to other OSs is simple: all OS dependencies are segregated in a single file of typically less than 100 lines of code.

Documentation:

On-line documentation only, in English. Currently in plain ASCII text; texinfo and HTML versions are in preparation.

Product Support:

Normally included in license; by EMail, phone, and fax.

Extra Features and Add-Ons:

N/A. Each input language is priced separately, with a discount for multiple languages.

Available Since:

1988 as free software, 1991 commercially.

Countries with Distribution:

World wide.

Price Range:

Negotiated for each customer.

Vendor:

Artifex Software Inc.

```
454 Las Gallinas Ave., Suite 108
San Rafael, CA 94903
U.S.A.
```

Phone:

(415)492-9861

Fax:

(415)492-9862

EMail:

info@arsoft.com

Url:

http://www.cs.wisc.edu/ ghost/index.html

Last modified:

October 15, 1996.

15.3 Emulus

Description:

Emulus is an X-Windows/Motif application which uses TCP/IP to establish a connection to an IBM mainframe host, emulating a 3270 terminal. Emulus supports mainframe graphics, including 3270 graphics datastream extension used by mainframe SAS Software. Other features include customization through dialogs, a scripting facility to record and playback host interaction, EasyPads (customized windows of buttons), and cut and paste between Emulus and other X applications. Emulus also comes with Helplus, an hypertext help viewer modeled after WinHelp. It is used to provide online help for Emulus, but can also be used to develop Help for other X applications.

Distribution Media:

CD-ROM only.

Licensing Policy:

Licensing is per CPU.

OS Provisions:

Linux 1.2 or higher, 8-16 MB RAM, 5 MB hard disk; Motif statically linked.

Documentation:

Printed book, man pages, online help, English.

Product Support:

Technical Support from SAS Institute.

Extra Features and Add-Ons:

N/A

Available Since:

N/A

Countries with Distribution:

N/A

Price Range:

US$99; includes hardcopy documentation, and Technical Support for one year.

Vendor:

SAS Institute Inc.

```
SAS Campus Drive
Cary, NC 27513
U.S.A.
```

Phone:

(919) 677-8000

Fax:

919-677-8166

EMail:

saspjh@unx.sas.com

Url:

http://www.sas.com

Contact:

Phil Herold

Last modified:

October 11, 1996.

15.4 PKWARE Data Compression Library for Linux

Description:

The library consists of a compression, an extraction, and an error checking routine. It does not create .ZIP compatible files.

Distribution Media:

N/A

Licensing Policy:

Per machine with no runtime royalties.

OS Provisions:

Intel x86, 36 KB RAM for compressing and 13 KB RAM for uncompressing, 1 MB on hard disk.

Documentation:

Printed 33 page manual and separate installation notes in English. Example code provided on disk.

Product Support:

N/A

Extra Features and Add-Ons:

N/A

Available Since:

N/A

Countries with Distribution:

N/A

Price Range:

US$450. Educational discount available.

Vendor:

PKWARE, Inc.

```
9025 N. Deerwood Drive
Brown Deer, WI 53223-2480
U.S.A.
```

Phone:

1-414-354-8699

Fax:

1-414-354-8559

EMail:

info@pkware.com

Url:

http://www.pkware.com

Contact:

Bob Gorman

Last modified:

October 10, 1996.

16 Free Software for Commercial Hardware

This section is somewhat “exotic”. It covers free Linux software (drivers et cetera) for specialized hardware. This is no “commercial software”, however, the software is unusable without the hardware.

16.1 Stallion Technologies Multiport Serial Boards

Description:

Stallion provides Linux support for its EasyIO and EasyConnection range of multiport cards. EasyIO is available with either 4 asynchronous serial ports with RJ45 connectors, or 8 asynchronous serial ports with RJ45 or DB25 connectors. EasyIO supports data rates of up to 145 Kbits/sec per port and full modem signaling. Drivers are available for most Intel-based operating systems, including Linux. EasyIO is available for the ISA bus.

EasyConnection is an expandable multiport solution that provides from 8 to 64 asynchronous serial ports in 8 or 16 port increments. Both RJ45 and DB25 connectors are available. Features include full surge suppression, full modem signaling, and data rates of up to 145 Kbits/sec per port. Drivers are available for most Intel-based operating systems, including Linux. EasyConnection is available for the ISA, EISA and PCI bus.

Distribution Media:

Linux drivers are available from the Internet archive sites:

- ftp://ftp.stallion.com
- ftp://sunsite.unc.edu
- ftp://tsx-11.mit.edu

Licensing Policy:

The Linux driver is available at no charge and is copyrighted under the GNU General Public License. Source code is provided.

OS Provisions:

The most current driver supports kernel versions 1.2.5 and later (including 2.0.x). The drivers are updated regularly to keep pace with kernel changes.

Documentation:

Hardware reference documentation provided with the boards. The Linux driver package contains a README file with driver installation and usage information.

Product Support:

Stallion Technologies now fully supports the Stallion board Linux drivers. Software updates are available from the Internet. Stallion also provides technical support for the hardware. Contact Stallion support for assistance.

Extra Features and Add-Ons:

N/A

Available Since:

October, 1994.

Countries with Distribution:

World wide distribution. Available in most countries.

Price Range:

Prices for the serial boards vary from country to country. Contact your nearest Stallion Technologies office for local availability and pricing. The driver package contains a file with contact information for all Stallion Technologies offices.

Vendor:

Stallion Technologies Pty Ltd.

```
2880 Research Park Drive, Suite 160
Soquel, CA 95073
U.S.A.
```

Phone:

800 347-7979

Fax:

(408) 477-0444

EMail:

info@stallion.com

Url:

http://www.stallion.com

FTP:

ftp://ftp.stallion.com

Last modified:

October 16, 1996.

17 Value Added Resellers (VARs)

This section contains some companies who sell preconfigured hardware for the purpose of running Linux.

17.1 Advanced System Lab

```
2342 Shade Tree Lane
San Jose, CA 95131
U.S.A.
```

Phone:

+1.408.923.3837

Fax:

+1.408.923.4615

EMail:

info@aslab.com

Url:

http://www.aslab.com

Contact:

Jeff Nguyen

Last modified:

August 20, 1996.

17.2 Apache Digital Corporation

```
777 Main Ave. Suite 211
Durango CO 81301
U.S.A.
```

Phone:

(970) 259-8153

Fax:

(970) 259-8145

EMail:

mgw@apache.com

Url:

http://www.apache.com

Contact:

Mark Wauchope

Last modified:

August 9, 1996.

17.3 BEE Baastrup EDV-Entwicklung GmbH

```
Mallinkrodtstra{\ss}e 7
D-44145 Dortmund
Germany
```

Phone:

+49-231-9812060

Fax:

+49-231-9812062

EMail:

info@bee.de

Url:

http://www.bee.de

Contact:

Jörn Baastrup, Jürgen Stanke, Jörg Bellwinkel

Last modified:

October 7, 1996.

17.4 Chaos Computing, Inc.

```
8450 Ann Marie Tr.
Inver Grove Heights, MN 55077
U.S.A.
```

Phone:

(612) 552-1920

Fax:

None

EMail:

sales@chaoscomp.com, info@chaoscomp.com

Url:

http://www.chaoscomp.com

Contact:

Eric Rotvold

Last modified:

August 14, 1996.

17.5 Hard Data Ltd.

```
11060 - 166 Avenue
Edmonton, AB
Canada
T5X 1Y3
```

Phone:

01-403-456-1510

Fax:

01-403-456-1510

EMail:

maurice@ellpspace.math.ualberta.ca

Url:

Not yet.

Contact:

Maurice Hilarius

Last modified:

August 25, 1996.

17.6 Linux Hardware Solutions, Inc.

```
1917 Wild Dunes Drive
Raleigh, NC 27604
U.S.A.
```

Phone:

+1 919-231-0248 or +1 888-LINUX-HW

Fax:

+1 919-212-0659

EMail:

info@linux-hw.com

Url:

http://www.linux-hw.com

Contact:

Kit Cosper <cosper@linux-hw.com>

Last modified:

August 13, 1996.

17.7 Nene Information Systems

```
32 Glasgow street
St James
Northampton
NN5 5BL
UK
```

Phone:

+44 (0) 1604 464561

Fax:

None

EMail:

tim@nisys.demon.co.uk

Url:

http://www.nisys.demon.co.uk

Contact:

Timothy Peters

Last modified:

September 11, 1996.

17.8 Pacific Internet

```
600 Corporate Pointe, Suite 100
Culver City, CA 90230
U.S.A.
```

Phone:

(310) 410-9700

Fax:

(310) 410-9727

EMail:

sales@pacnet.com

Url:

http://www.pacnet.com

Contact:

Tania Hayek, K. Kamath, Michael Boyer, Denise Schutte, Maria Lepisto, Natalie Jackson

Last modified:

August 9, 1996.

17.9 Sound Software Ltd.

```
20 Abelard Avenue
Brampton ON
Canada
L6Y 2K8
```

Phone:

(905) 452 0504

Fax:

(905) 452 9754

EMail:

sales@telly.org

Url:

http://www.ftn.net/telly/sound.html

Contact:

Evan Leibovitch

Last modified:

August 16, 1996.

17.10 SW Technology

```
1701 North Greenville Suite 1104
Richardson, TX 75081
U.S.A.
```

Phone:

214-907-0871

Fax:

214-907-9339

EMail:

sales@swt.com

Url:

http://www.swt.com

Contact:

Marvin Y. Wu

Last modified:

August 9, 1996.