Initial product line for vendor sites

Cygnus Support

(415) 322-3811

Cygnus Support provides users with support for free software. We give access to what is widely regarded as some of the best software in the Unix environment. We also give them access to the services of some of the most qualified support people: the authors of that software.

By using free software, users are liberated from the constraints of a single supplier; since source is available the opportunity for maximal portability is assured. By using Cygnus Support, users need no longer worry about new features, release dates, stability, or compatability. Users also may influence the technical evolution of the next generation of platform-independent tools.

Cygnus systems makes the phrase "Open Systems" a reality by providing source code for every package we support.

Our initial product is a support package for C and C++ code development, plus support for the Emacs editor. Other support packages are planned.

This document explains how hiring Cygnus Support can provide computer vendors with a strategic product, one which can be used as a sales and marketing tool, one which will help with advanced development projects, and one which will contribute to overall customer support and satisfaction. Because of the systems orientation of the software we support, vendors have the most to gain from our services, though we expect the customers of vendors to be our largest market.

1 Free software

Although it is not a traditional option, the choice of free software is straightforward when one considers the following:

- Many of the best Unix tools are already free software.
- Free Software has tracked and driven industry standards.

[0]Unix is a trademark of AT&T.
SUN-3, SUN-4, and SPARC are trademarks of Sun Microsystems, Inc.

- Free Software is widely used in the research community.
- Cygnus Support is intimately familiar with this software as we have extensive experience using, debugging, and in many cases *implementing* it.
- As all the source code is freely available, users and developers who wish to extend the software may do so. Free software is truly open software.
- Free Software and Cygnus Support free the user to fit the software to his or her needs
- Free Software and Cygnus Support free the vendor to concentrate on its primary business instead of low-level tools

What do we mean by "best Unix tools?" Free software, especially software we support from the GNU project, tends to be faster, more powerful, and more portable than its commercial counterparts. For instance, the C compiler `gcc` runs on the majority of platforms; on some the code it generates is as much as 30% faster than that produced by the vendor's compiler. It was the first Draft ANSI-compilant C compiler. It is the only Unix C compiler which lets the user debug optimized code.

The Emacs editor is considered by many *the* indispensible tool of the Unix environment. This extensible editor has been programmed to be the interface for innumerable tools.

The `g++` compiler was the first native-code C++ compiler available outside of Bell Labs. It now implements all the features of C++ 2.0, including multiple inheritance. As it uses the same back end as `gcc`, it automatically runs on any machine which suppports `gcc`, and does the same optimizations. In addition, it provides additional C++ specific optimizations.

Other free software, described in our *User Prospectus*, enjoys similar advantages.

These features are now available to those who need the reliability of supported software, through a support contract from Cygnus Support.

2 Services for Vendors

2.1 Initial Support Package

Our initial support package is aimed at advanced research labs of 50 to 150 users. These sites currently bear heavy indirect software costs. Those who are not using free software pay the costs of using tools which are less efficient, less powerful, and often not adequately supported by the vendor. Those who have chosen to use free software have had to pay for self-maintenance, third party consultants, and potentially schedule delays when bugs turn up at bad times. For this, we provide a cost-effective solution.

Many computer vendors—as computer users themselves—have the same problems, and for them the same solution applies: hire us to provide support. This document describes an additional service that we offer only to computer vendors: a platform support guarantee.

2.1.1 Platform Support Guarantee

Our platform support guarantee is a guarantee that:

- We will port all software we support to the platform
- We will work aggressively to ensure that the software takes full advantage of the platform as it evolves over time
- We will continue to support all our software on the platform as long as the vendor maintenance contract continues
- We will treat all supported platforms fairly and equally in our maintenance effort

We would like to work with as many vendors as possible, but practical considerations dictate that until we have the resources, we must limit the variety of platforms we support. To accomplish this, we will support only one platform per vendor during the first year. After that time, we will re-open the question of providing vendors with support on multiple platforms.**This is a useless restriction. Were DEC to pay for both vax and pmacs we should of course take the money!**

2.1.2 Implementation Details

The primary candidates for out platform support contract are systems using 32-bit processors and running some standard variant of UNIX. The cost is $1M for the first year to support a platform (plus porting fees, if any). Subsequent years cost $250K/annum.

The money will be allocated as follows: **Let's talk this over – Gumby**

$100K – Acquire machines for porting, development, and maintenance.

$200K – Two full-time technical staff dedicated to platform.

$200K – Two full-time technical support staff

$100K – One full-time market research person

$100K – One full-time marketing person

$300K – Reserves for handling initial customers and/or technical assignments

people will be suspicious that this doesn't include "profit" (or is that the 300K?). These figures are fishy anyway. How much for a second arch? 500K?) The explanations below are wordy, but I want to delete them anyway.

The **machines** we will acquire serve as our internal instance of "the platform" that we choose to support. If machines are binary compatible (such as `VAXstation 3100` and `VAX 9000`), we will offer support for both if we provide support for one, provided they run the same operating system. The support we provide only applies to the vendor who pays for it. OEMs, VARs, and clone companies must contract seperately in order to work with us.

Our **technical staff** for vendor platform support are experts (or eager and capable of becoming experts) for that platform. They are primarily responsible for assuring that the ports of the compilers, debugger, and other machine-specific programs are made to work on the platform. They are responsible for ironing out architecture and machine-specific problems as they arise, and for taking advantage of architecture or machine-specific opportunities provided they can do so portably.

Our **technical support staff** handles problems as they might arise closer to the user. This entails making documentation consistent with platform behavior (when behavior differences are an unavoidable consequence of the platform), and making sure that higher-level software is comfortably integrated with the environment. They are also responsible for testing.

Our **market research** person is responsible for developing plans by which Cygnus Support and the vendor can further take advantage of their relationship in developing new clients.

Our **marketing person** is responsible for promoting the benefits that vendor can now offer to their customers through Cygnus Support.

Finally, there is the need for **reserves**. In the first year, when looking for a customer, we look for a site which is very well suited to the support we offer, one which will require little adaptation, either for us or the customer. To be truly useful to the vendor, however, we must be able to provide support for sites which will require more effort. The reserves make it possible for us to provide support to such sites earlier than we would otherwise. It also makes it possible for us to offer on-site support which our regular customers would not normally receive, giving the vendor a premium service to offer premium customers.

Alternatively, reserves make it possible for us to offer a higher level of technical consulting for the vendor. Corelation of technical direction, coordination of technical progress, and cooperation in technical venture has a high payoff when based on our supported software. While we normally do not offer any consulting services *per se*, the reserves will allow us to enter conversations with internal groups and/or third parties who are working on the platforms of the future.

The $250K **annual maintenance fee** is used to retain two of our initial staff (technical and technical support), and provide a small continuing reserve

20% profit.

Note that with this allocation of resources, the $1M does *not* buy shares in the company. We are supporting free software which is designed to run without prejudice on the platforms we support. It would be confusing to customers and threatening to vendors to have any customer purchase shares in our company. From a business standpoint (both for us and for the vendor) it would be best to work with all vendors at arm's length, delivering support for all customers without having to worry about any behind-the-scenes dealing.

3 Benefits to the Vendor

3.1 Access to Potential Customers

3.1.1 Addresses Customer Needs

Software sells machines. If a machine cannot run a customer's application, he or she will not care how fast it is. Freely distributable software, such as `GNU Emacs`, the `GNU` compilers, and the `GNU` debugger, have become important application programs within research and academic communities and among high-powered developers. However, most company software policies prohibit the use of unsupported software, effictively closing their computers to these applications.

With our initial support product offering, we are opening up the commercial potential of the free software market. This market has some of the best software available for `UNIX`, and has developed a loyal following of high-powered users. Our aim is to bring this software within reach of everybody who uses a computer, and to give every one of those users the training, support, and upgrades they need to stay on top. Platforms which do not support these tools are at a distinct disadvantage within these markets and the clients of these markets.

3.1.2 Sales Tools

Given the highly competitive nature of the `UNIX` workstation market, sales people must be more responsive to customer needs than ever before. Some of these customers are now demanding support for free software. Today, they know how unlikely it is that the vendor will give them this support, but tomorrow, Cygnus Support will be there for them to call, and our support package will give an edge to the platforms we choose to support.

Customer needs are real now. The software we support is real now. Cygnus Support is a tool that can be used by the sales force today.

3.2 Service for a Vendor's Existing Customers

From a technical point of view, most software that comes from the Free Software Foundation (`GNU Emacs`, `GCC`, etc.) far outshines the `UNIX` equivalent, creating a loyal following among industry innovators and early adopters. The most common reason given for not using the software is the lack of commercial support. We believe that if given high-quality support, our free software will reach a very broad market share, surpassing many commercial versions now on the market, and may even (due to its quality, performance, and availability) become *the* standard. In fact, `GNU Emacs` is becoming such a standard among editors.

3.2.1 Serving Strategic Customers

We first will offer support in specific markets: commercial research labs, government research labs, and leading academic institutions. We will then guide free software into other software markets. We will take advantage of the following factors to make it easier for us to help our first customers:

- Users are already using free software in an unsupported capacity
- Users are frustrated with vendors who will not provide support for these programs
- Our group is very familiar with the code we intend to support; we have already written, ported, or helped support this software
- We can free up employees from spending time installing, debugging and supporting free software, and give them a chance to start using it!

Our support package provides the vendor with the following deliverables:

- An easy way to provide potential customers with a migration path to the vendor's platform
- a chance to save money on expensive and difficult software development and support
- advertising the availability of commercial support for this well known software on their platform
- a way for a vendor to provide its customers with support for tools which the vendor cannot, for various reasons, support itself

3.2.2 Keeping Customers Happy

The last point is very important, for it defines our market niche and an opportunity for the vendor. By endorsing our service, vendors will be able to deliver to customers what they want, without assuming all the attendant risk. **we shouldn't say this at all, methinks** If we are successful, the vendor will be recognized as having made the right decision. If we fail, our position will be ruined, but customers will recognize that the vendor made the attempt to deliver what was asked for, using the best people for the job. In either case, the expenditure by the vendor for the customer will translate into good will not just from one customer, but from every customer demanding this service. This win-win scenario can backfire if the vendor tries to provide support itself: if the support effort fails, the blame will inevitably fall on the vendor.

3.3 Our Support Product

Since we are not providing a proprietary software product, our primary means of customer capture is the quality of our support. The quality and availability of that support depends on:

- the quality of our support team
- the resources we can devote to support and market growth
- the quality of the hardware platform on which the support is provided
- the cost of the support, relative to in-house support by the customer
- the size of the support market for the platform

These factors determine what kind of support we can promise to our customers, and what kind of support we can provide for our vendors. While we want many customers, it does not make sense to attract customers we cannot afford to support. Vendors who recognize the potential payoff Cygnus Support can provide — happier customers, loyal customers, and more customers — will be eager to invest the money that enables us gear up to support their platform as soon as possible.

3.4 Transferable Technology

Our software development effort will progress with consideration for vendors' current and future plans and needs, delivering timely, high-leverage software. In addition to the direct sales and marketing advantages presented in the previous sections, our software also helps vendors to produce their next-generation products in three ways: better development tools, faster turn-around for advanced development, and reducing technological risk.

3.4.1 Modern Technology

The tools we are developing and supporting were built in the late 1980s, not in the early 1970s. Not only do they benefit from today's improved understanding of software engineering, but they also specifically avoid design and implementation bugs and limitations of their predecessors. Our tools give developers familiar interfaces while freeing them from the traditional small-machine models. Our software adopts newer algorithms that offer improved performance and extended capabilities compared to the standard `UNIX` tools.

3.4.2 Faster Turn Time

Faster turn-around time is achieved as a result of our products' architecture. Portability is designed in, and portable coding practices mean faster software transfer to new systems. It is no accident that in less than two years, the `GNU C` compiler was running on over a dozen platforms, from the `IBM 370` to the latest RISC processors, or that `GNU Emacs`, despite its complexity, runs on virtually every system that runs `UNIX`.

3.4.3 Risk Reduction

For advanced development, risk reduction means having alternate technologies available in case a vendor's primary efforts do not pan out. It also means being able to experiment with open, rather than proprietary software. Our tools can be used by the vendor or any third party of the vendor's choosing, and they can even be commercialized effectively, yet they can be had at a much lower cost than a second internal development project.

4 Why You Should Sign Up Now

4.1 Customer Support Options

Customers are going to go where the support is. Until now, customers avoided using free software because of lack of support. Now they can use it and they will use it. There are three logical sources for customer software support: the software vendor, the hardware vendor, or a third party.[1]

Software vendors are in the business of selling software, and have little time for support.

Hardware vendors have little incentive to provide software support because their income comes from hardware.

[1] We do not consider the case that the user supports themselves, because in general that is too costly, and most users do not want to be in the support business, even for themselves. **this point is irerrelevent**

Third parties such as independent consultants are often employed for short-term, fire-fighting missions. There are several reasons why hiring a consultant is not an optimal solution, and why one sees so few successful consulting arrangements executed:

- they need time to understand a client's problem at precisely the moment when time is scarce
- they are called in only when the problem has become critical; there is no easy way for them to perform preventative technology maintenance **what does this mean?**

We provide better support at lower cost. Our support is on target (since we wrote the software in the first place), consistent (since we have a large user base), comprehensive (since we have a deep talent pool from which to draw), and economical (since the cost is spread over a high volume).

As the `UNIX` workstation market continues to grow, vendors must increasingly concentrate their efforts on production. At the same time, each machine the customer buys becomes another source of need for support. This divergence of supply and demand is creating a strong market ripe for support. Those who provide it best will keep existing customers satisfied, and will provide potential customers with yet another compelling reason why they should switch, not fight.

If you have any questions how Cygnus Support can help, please call us at (415) 322-3811.