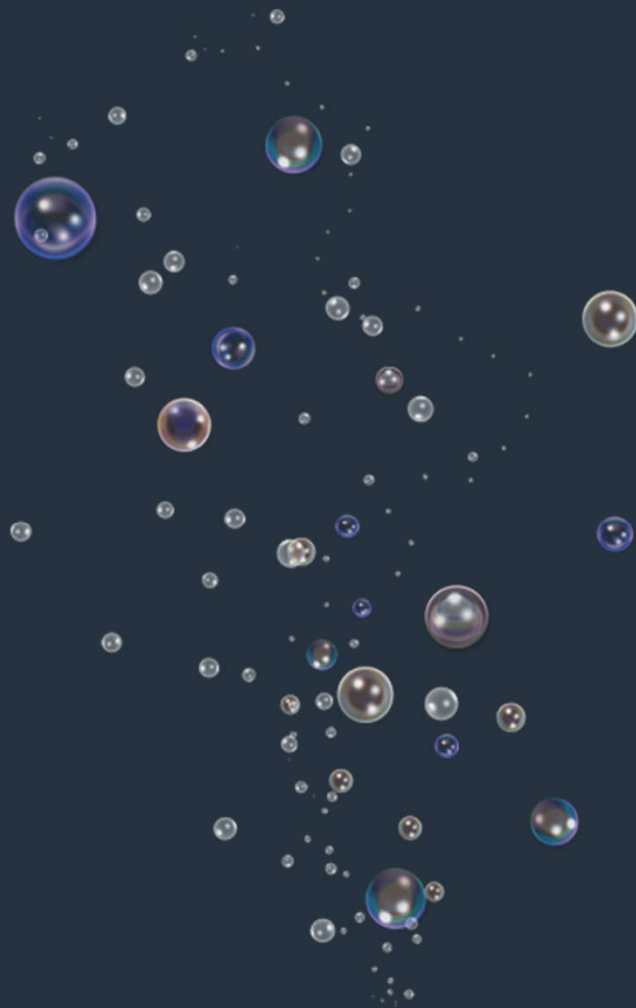




Linux简介

大连理工大学 赖晓晨



什么是GNU (**G**NU is **N**ot **U**nix)



GNU的历史

- 理查德·斯托曼
- 自由软件
- GNU的含义
- GPL
- GNU/Linux



致电脑爱好者的公开信

-2-

February 3, 1976

An Open Letter to Hobbyists

To me, the most critical thing in the hobby market right now is the lack of good software courses, books and software itself. Without good software and an owner who understands programming, a hobby computer is wasted. Will quality software be written for the hobby market?

Almost a year ago, Paul Allen and myself, expecting the hobby market to expand, hired Mike Davidoff and developed Altair BASIC. Through the initial work took only two months, the three of us have spent most of the last year documenting, improving and adding features to BASIC. Now we have 4K, 8K, EXTENDED, ROM and DISK BASIC. The value of the computer time we have used exceeds \$40,000.

The feedback we have gotten from the hundreds of people who say they are using BASIC has all been positive. Two surprising things are apparent, however. 1) Most of these "users" never bought BASIC (less than 10% of all Altair owners have bought BASIC), and 2) The amount of royalties we have received from sales to hobbyists makes the time spent of Altair BASIC worth less than \$2 an hour.

Why is this? As the majority of hobbyists must be aware, most of you steal your software. Hardware must be paid for, but software is something to share. Who cares if the people who worked on it get paid?

Is this fair? One thing you don't do by stealing software is get back at MITS for some problem you may have had. MITS doesn't make money selling software. The royalty paid to us, the manual, the tape and the overhead make it a break-even operation. One thing you do is prevent good software from being written. Who can afford to do professional work for nothing? What hobbyist can put 3-man years into programming, finding all bugs, documenting his product and distribute for free? The fact is, no one besides us has invested a lot of money in hobby software. We have written 6800 BASIC, and are writing 8080 APL and 6800 APL, but there is very little incentive to make this software available to hobbyists. Most directly, the thing you do is theft.

What about the guys who re-sell Altair BASIC, aren't they making money on hobby software? Yes, but those who have been reported to us may lose in the end. They are the ones who give hobbyists a bad name, and should be kicked out of any club meeting they show up at.

I would appreciate letters from any one who wants to pay up, or has a suggestion or comment. Just write me at 1180 Alvarado SE, #114, Albuquerque, New Mexico, 87109. Nothing would please me more than being able to hire ten programmers and deluge the hobby market with good software.

Bill Gates
Bill Gates
General Partner, Micro-Soft

这合理公平吗？如果你们偷盗软件，当遇问题时，你们就不能要求MITS公司解决问题。MITS并没有从销售软件中挣到钱。因为他们付给我们的版税以及软件的使用手册，磁带和企业管理费用低消了软件收入，仅仅达到收支平衡。你们现在所做的一切正在阻止人们去编写好的软件。

谁会从事专业的软件开发却分文无获。哪有业余爱好者会花费3人年的精力去编写软件，去修正软件，编写使用手册却免费发放给别人使用。事实上，只有我们大量投资来为个人电脑做软件。我们已经写了6800 BASIC写成了8080APL和6800 APL，但是现在几乎没有什么动力让我们向你们提供这些软件。说白了，你们的所作所为就是窃贼(Theft)。



比尔·盖茨 & 史密斯

图片来自百度



图片来自百度

理查德·斯托曼 & 莫菲斯



图片来自百度

林纳斯 & 尼奥

Linux的历史



Unix:

- 肯·汤普森、丹尼斯·里奇
- AIX、BSD、HP-UX、solaris



minix

- 安德鲁·坦尼鲍姆 《操作系统设计与实现》



Linux

- 1991年，芬兰赫尔辛基大学
linus Torvalds



第一篇Linux的帖子

From: torvalds@klaava.Helsinki.FI

Newsgroups: comp.os.minix

Subject: What would you like to see most in minix?

Date: 25 Aug 91 20:57:08 GMT

Hello everybody out there using minix. I'm doing a (free) operating system (just a hobby, won't be big and professional like gnu) for 386(486) AT clones. This has been brewing since april, and is starting to get ready. I'd like any feedback on things people like/dislike in minix, as my OS resembles it somewhat (same physical layout of the file-system (due to practical reasons) among other things).

关于Linux的争论



Andy Tanenbaum

- 大内核
- 过分依赖体系结构



Linus Torvalds

- 可用更重要
- posix

Linux的应用领域



高端服务器领域

➤ 获得IBM、戴尔、惠普、甲骨文等厂商支持



桌面应用领域



嵌入式应用领域

➤ 源码公开、可裁减

Linux的组成

- ✓ Linux是一个功能强大的完备的操作系统
- ✓ 符合POSIX标准
- ✓ 包含完整的操作系统组件
- ✓ 文本编辑器、高级语言编译器、应用程序、X-Window图形用户接口、网络服务器组件

Linux版本号



发行版本与内核版本

优麒麟16.04采用4.4版本内核

常见Linux发行版



Slackware



Redhat



- 支持的硬件平台多、优秀的安装接口、独特的rpm安装方式、丰富的软件、方便的系统管理接口、完备的文档



fedora core & fedora



SuSE



常见Linux发行版（续）



Debian



红旗Linux



Xteam



ubuntu



ubuntu Kylin（优麒麟）



Linux的安装



安装方式

- 直接在硬盘上安装
- 用虚拟机vmware安装



嵌入式软件设计

大连理工大学 赖晓晨

