Linux第一章

第一章.Linux和Unix的发展史

1.Unix的发展史

（1）1965年，美国麻省理工学院（MIT）、通用电气公司（GE）及AT&T的贝尔实验室联合开发Multics工程计划，其目标是开发一种交互式的具有多道程序处理能力的分时操作系统，但因Multics追求的目标过于庞大复杂，项目进度远远落后于计划，最后贝尔实验室宣布退出。

（2）1969年，美国贝尔实验室的肯• 汤普森在DEC PDP-7机器上开发出了UNIX系统。

（3）1971年，肯• 汤普森的同事丹尼斯• 里奇发明了C语言；1973年，UNIX系统的绝大部分源代码用C语言重写，这为提高UNIX系统的可移植性打下基础。

2.Unix的主要发行版本

操作系统	公司	硬件平台CPU
AIX	IBM	PowerPC
HP-UX	HP	PA-RISC
Solaris	Sun	SPARC
Linux	Red Hat Linux、Ubuntu Linux..	IA（Intel、AMD、Cyrix、RISE...）

3.Linux的发展历史

Linux系统诞生于1991年，由芬兰大学生李纳斯(Linus Torvalds)和后来加入的众多爱好者一起完成。

李纳斯的老师埃德温因UNIX收费，所以教学时自己开发了一款MINIX操作系统

Linux是一个开源软件，是源代码开放的Unix.。

Linux的内核可以参照官网：www.kernel.org，目前最新的内核版本是5.15

Linux的主要发行版本：

4.开源软件

开源软件的特点：

- 使用的自由：绝大多数开源软件免费
- 研究的自由：可以获得软件的源代码
- 散布及改良的自由：可以自由传播、改良，甚至销售

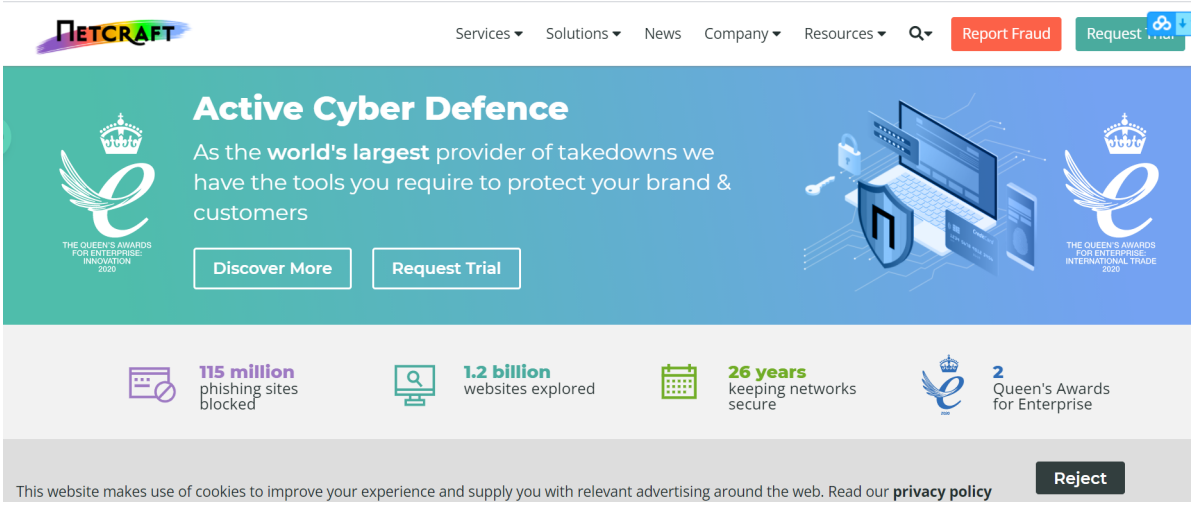
5.Linux的应用领域

Linux的应用领域大致分为3中：

1. 基于Linux的企业服务器
2. 嵌入式应用
3. Linux在电影娱乐业的应用

5.1.Linux基于企业服务器的应用

https://www.netcraft.com/--互联网市场以及在线安全方面的咨询服务



Hoster Parent	Leaseweb
Hoster	(All)
Hosted	(All)
Country	(All)
Continent	(All)
MajorVendor	(All)
Product	(All)
Protocol	(All)

Sum of Computers	Date									
MajorOpSys	Jan 13	Jan 14	Jan 15	Jan 16	Jan 17	Jul 17	Oct 17	Nov 17	Dec 17	Jan 18
Linux	15,680	16,429	15,921	15,045	15,089	17,011	34,480	35,002	38,379	40,071
Microsoft	4,502	6,220	4,984	3,593	3,199	4,373	4,312	4,193	4,518	5,204
Other	437	425	521	562	588	760	1,351	1,168	1,180	1,258
FreeBSD	853	865	799	621	535	525	477	479	479	434
Sun	2	2	2	2	0	0	0	0	0	0
Grand Total	21,473	23,941	22,227	19,822	19,410	22,669	40,620	40,842	44,557	46,967

www.qq.com

Network

Site	http://www.qq.com	**Netblock Owner**	Akamai Technologies
Domain	qq.com	**Nameserver**	ns1.qq.com
IP address	92.122.126.40	**DNS admin**	webmaster@qq.com
IPv6 address	*Not Present*	**Reverse DNS**	a92-122-126-40.deploy.akamaitechnologies.com
Domain registrar	hichina.com	**Nameserver organisation**	grs-whois.hichina.com
Organisation	Shenzhen Tencent Computer Systems Company Limited, 35 F, Tencent Building, kejinanyi Avenue, Southern District, Shenzhen, 518057, China	**Hosting company**	*unknown*
Top Level Domain	Commercial entities (.com)	**DNS Security Extensions**	*unknown*
Hosting country	EU	**Latest Performance**	Performance Graph

Hosting History

Netblock owner	IP address	OS	Web server	Last seen	Refresh
Akamai International, BV Prins Bernhardplein 200 Amsterdam NL 1097 JB	23.62.53.83	Linux	squid/3.1.18	13-Dec-2013	
Akamai International, BV Prins Bernhardplein 200 Amsterdam NL 1097 JB	23.62.53.51	Linux	squid/3.1.18	11-Dec-2013	
Akamai International, BV Prins Bernhardplein 200 Amsterdam NL 1097 JB	23.62.53.83	Linux	squid/3.1.18	10-Dec-2013	
Akamai International, BV Prins Bernhardplein 200 Amsterdam NL 1097 JB	23.62.53.51	Linux	squid/3.1.18	7-Dec-2013	
Akamai International, BV Prins Bernhardplein 200 Amsterdam NL 1097 JB	23.62.53.83	Linux	squid/3.1.18	6-Dec-2013	
Akamai Technologies	92.122.123.57	Linux	squid/3.1.18	4-Dec-2013	
Akamai International, BV Prins Bernhardplein 200 Amsterdam NL 1097 JB	23.62.53.51	Linux	squid/3.1.18	2-Dec-2013	
Akamai International, BV Prins Bernhardplein 200 Amsterdam NL 1097 JB	23.62.53.83	Linux	squid/3.1.18	1-Dec-2013	
Akamai International, BV Prins Bernhardplein 200 Amsterdam NL 1097 JB	23.62.53.51	Linux	squid/3.1.18	30-Nov-2013	
Akamai International, BV Prins Bernhardplein 200 Amsterdam NL 1097 JB	23.62.53.83	Linux	squid/3.1.18	27-Nov-2013	

www.taobao.com

Network

Site	http://www.taobao.com	**Netblock Owner**	Alibaba
Domain	taobao.com	**Nameserver**	ns1.taobao.com
IP address	195.59.70.251	**DNS admin**	tiexin@taobao.com
IPv6 address	*Not Present*	**Reverse DNS**	*unknown*
Domain registrar	*unknown*	**Nameserver organisation**	*unknown*
Organisation	*unknown*	**Hosting company**	Cable & Wireless
Top Level Domain	Commercial entities (.com)	**DNS Security Extensions**	*unknown*
Hosting country	UK	**Latest Performance**	Performance Graph

Hosting History

Netblock owner	IP address	OS	Web server	Last seen	Refresh
Alibaba	195.59.70.241	Linux	Tengine	13-Dec-2013	
Alibaba	195.59.70.251	Linux	Tengine	12-Dec-2013	
Alibaba	195.59.70.241	Linux	Tengine	8-Dec-2013	
Alibaba	195.59.70.251	Linux	Tengine	6-Dec-2013	
Alibaba	195.59.70.241	Linux	Tengine	6-Dec-2013	
Alibaba	195.59.70.251	Linux	Tengine	2-Dec-2013	
Alibaba	195.59.70.241	Linux	Tengine	23-Nov-2013	
Alibaba	195.59.70.251	Linux	Tengine	23-Nov-2013	
Alibaba	195.59.70.241	Linux	Tengine	20-Nov-2013	
Alibaba	195.59.70.251	Linux	Tengine	18-Nov-2013	

download.microsoft.com

Network

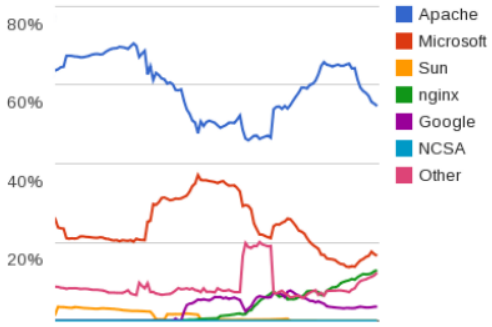
Site	http://download.microsoft.com	Netblock Owner	Akamai Technologies
Domain	microsoft.com	Nameserver	ns1.msft.net
IP address	92.122.126.168	DNS admin	msnhst@microsoft.com
IPv6 address	2a02:26f0:27:0:0:0:c3f5:7d8a	Reverse DNS	a92-122-126-168.deploy.akamaitechnologies.com
Domain registrar	unknown	Nameserver organisation	unknown
Organisation	unknown	Hosting company	unknown
Top Level Domain	Commercial entities (.com)	DNS Security Extensions	unknown
Hosting country	EU	Latest Performance	Performance Graph

Hosting History

Netblock owner	IP address	OS	Web server	Last seen	Refresh
Akamai International, BV Prins Bernhardplein 200 Amsterdam NL 1097 JB	23.62.2.27	Linux	Microsoft-IIS/8.0	13-Dec-2013	
Akamai International, BV Prins Bernhardplein 200 Amsterdam NL 1097 JB	23.62.2.33	Linux	Microsoft-IIS/8.0	6-Dec-2013	
Akamai International, BV Prins Bernhardplein 200 Amsterdam NL 1097 JB	23.62.2.27	Linux	Microsoft-IIS/8.0	4-Dec-2013	
Akamai International, BV Prins Bernhardplein 200 Amsterdam NL 1097 JB	23.62.0.232	Linux	Microsoft-IIS/8.0	2-Dec-2013	
Akamai International, BV Prins Bernhardplein 200 Amsterdam NL 1097 JB	23.62.0.209	Linux	Microsoft-IIS/8.0	1-Dec-2013	
Akamai International, BV Prins Bernhardplein 200 Amsterdam NL 1097 JB	23.62.0.232	Linux	Microsoft-IIS/8.0	29-Nov-2013	
Akamai International, BV Prins Bernhardplein 200 Amsterdam NL 1097 JB	23.62.0.209	Linux	Microsoft-IIS/8.0	27-Nov-2013	
Akamai International, BV Prins Bernhardplein 200 Amsterdam NL 1097 JB	23.62.0.232	Linux	Microsoft-IIS/8.0	25-Nov-2013	
Akamai International, BV Prins Bernhardplein 200 Amsterdam NL 1097 JB	23.62.0.209	Linux	Microsoft-IIS/8.0	24-Nov-2013	
Akamai International, BV Prins Bernhardplein 200 Amsterdam NL 1097 JB	23.62.0.232	Linux	Microsoft-IIS/8.0	23-Nov-2013	

Anti-Phishing | Security Testing | Internet Data Mining | Performance

Market Share for Top Servers Across All Domains

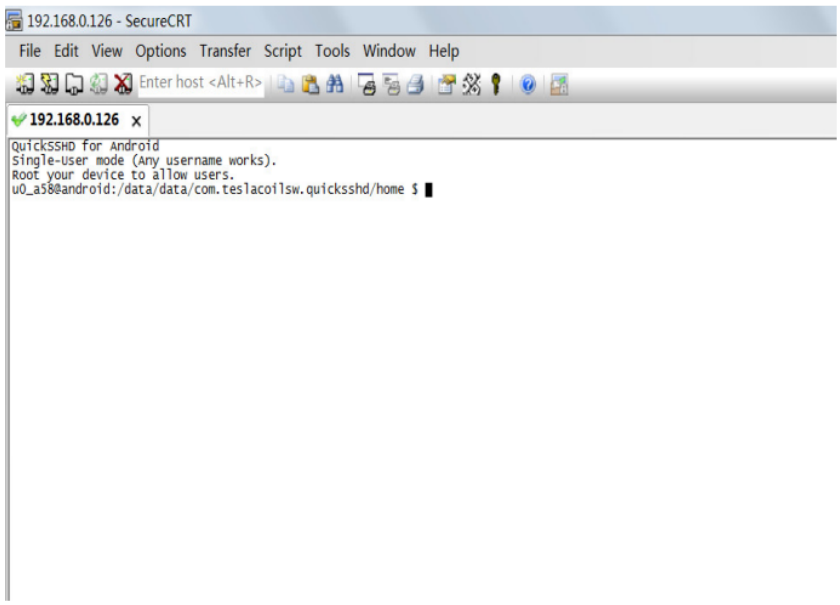


Understand your Competitors

- Worldwide analysis of hosting companies, identifying trends and customer movements
- Track technology adoption across the internet including the market share of web servers, operating systems, hosting providers and SSL certificate authorities
- See a list of all websites that match requested criteria (for example sites running a certain technology hosted in a particular country)
- Find out more

5.2.Linux在嵌入式领域的应用

- 手机、平板电脑



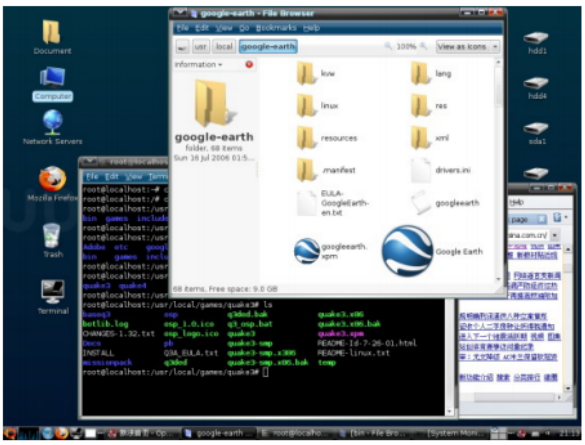
- 其他嵌入式应用

- 智能家电：机顶盒、游戏机、数码相机等；
- 智能卡系统
- 航空系统
- 银行系统
- KTV点歌系统。。。。。。。

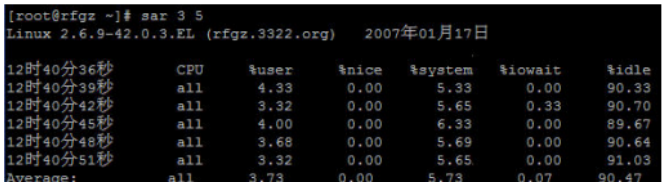
5.3.Linux在电影娱乐业的应用

6.Linux的学习方法

- 使用命令行



为什么选择
命令行



```
[root@rfgz ~]# sar 3 5
Linux 2.6.9-42.0.3.EL (rfgz.3322.org)   2007年01月17日

12时40分36秒       CPU     %user     %nice   %system   %iowait     %idle
12时40分39秒       all      4.33      0.00      5.33      0.00     90.33
12时40分42秒       all      3.32      0.00      5.65      0.33     90.70
12时40分45秒       all      4.00      0.00      6.33      0.00     89.67
12时40分48秒       all      3.68      0.00      5.69      0.00     90.64
12时40分51秒       all      3.32      0.00      5.65      0.00     91.03
Average:           all      3.73      0.00      5.73      0.07     90.47
```

- 解决问题的指挥：帮助、示例、文档、查找
- 英文提示的困惑
- 忘掉windows的思维方式
- 计划性的学习，专注以及坚持