Global Information Assurance Certification Paper

Network Security Assessment
Performed for Singing Beagle Productions
By Melete Security Association

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Joseph Purvis,
Principal Security Engineer

Executive Summary:

At the request of the customer, Singing Beagle Productions ("SB" or "the customer" hereafter), an internal audit was conducted of a single server, identified by the customer as their single most critical information asset and single greatest point of exposure to external network traffic. This was done as a proof-of-concept audit, meant to determine whether further auditing of corporate resources would be required.

The host known as "kumo.singingbeagle.org" (172.16.2.1) was examined thoroughly by a security engineer, Joseph Purvis, on 17 through 20 November, 2000. Thorough network scans and assessments were performed from the same network segment as the host (to assess actual security), and scans were performed through the firewall to assess the security of the firewall protection. The engineer also performed a host-based assessment to examine the operating system's configuration and overall security, and conducted interviews with key systems administration personnel to assess policies and procedures governing the day-to-day administration of the host.

When initially installed, some steps appear to have been taken to secure the host for public access, however such steps were insufficient even at the time; since no little to no ongoing maintenance has been provided for the host since then, the once "not-quite-secure" configuration has slipped entirely to a dangerously insecure configuration. Although the risk of compromise is mitigated by the firewalling and network address translation provided, the services available through the firewall would provide a determined attacker with a basic toolkit sufficient toeholds to compromise the server and gain access to the internal network.

In the short term, therefore, it is the recommendation of the engineer and Melete that the host be replaced as soon as possible; preferably, the host should be immediately decommissioned and rebuilt from scratch or replaced with a different server which has been thoroughly hardened by trained professionals. If the host cannot be decommissioned due to the criticality of applications running on it, a replacement host should be built as soon as possible, and the current host should be secured as best as time and resources will allow.

In the longer term, while the security knowledge of staff is deemed more than sufficient in general, Unix-specific security training should be provided for any staff responsible for maintaining the host. In addition, the development of clear policies and procedures for providing maintenance, upgrades, and monitoring of the host must be developed as soon as possible, and staff members must be given clear-cut lists of tasks and responsibilities to guarantee that necessary maintenance is performed in a timely and accurate manner. A set of configuration and deployment guidelines, written with security as a foremost goal, must be developed as soon as possible to govern the deployment of future hosts: some good guides for getting started with this are provided in Appendix A.

As for the possibility of further auditing, the engineer and Melete certainly would recommend it, whether conducted internally by the customer or by Melete. The problems uncovered here are sufficient to warrant investigation of the entire enterprise to examine larger issues of policy and procedure as well as examining other hosts:

many issues of policy have not been focused on as significantly here because the scope of the investigation was directed solely at a single host.

The rest of this document will provide a more in-depth discussion of each of these points, including tools and methods used to gather data; an analysis of the vulnerabilities discovered, organized by category and priority/risk level; conclusions drawn from the data received, and specific recommendations for improving the security of the system, including a rough costs estimate for implementing such recommendations.

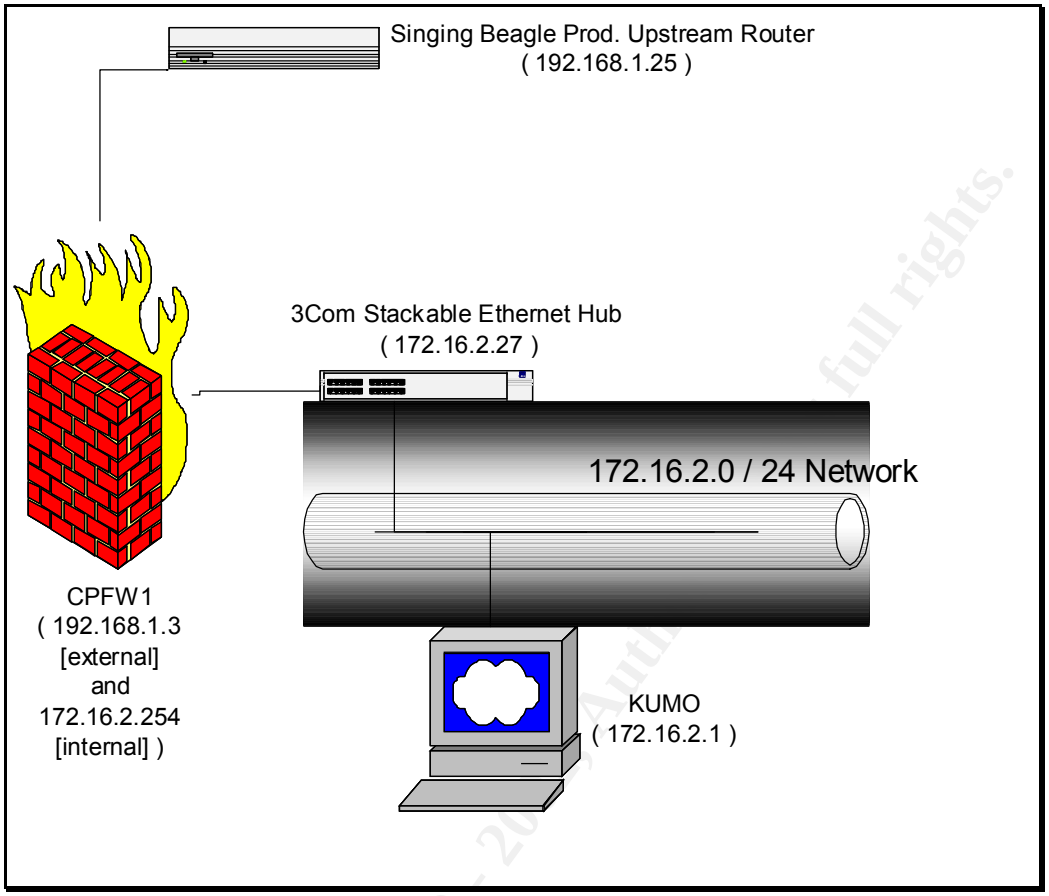
Detailed Findings and Analysis

Background: With the recent shift in internal staffing and a significant turnover of staff to a competitor, the management team at Singing Beagle Productions requested Melete Security Association to conduct an audit to define the company's current information security posture, and determine whether it required shoring up in any areas.

In order to determine initial areas requiring further focus, a single server was identified for a "proof of concept" audit: the server "kumo.singingbeagle.org" (172.16.2.1) was identified as the company's single greatest information security asset and the single point of greatest exposure to external network traffic on the company's network.

The host chosen, a Sun Ultra/1 running Solaris version 2.6, serves as the primary webserver for the company, including a support center for tracking trouble tickets regarding the company's products, an information distribution center for releasing new information about company products, and an FTP server to offer patches and upgrades for products sold and resold by the firm. The server sits on a DMZ (172.16.2.0 / 24) with several other corporate servers, including the company email server and an internal webserver; connectivity to the outside world is offered through a Check Point firewall in front of the network, performing Network Address Translation (NAT) to statically-defined external addresses. This means that customers connecting to the webserver do so through the firewall, but talk directly to the webserver: only the source and destination addresses of packets are altered in the course of a network transaction--no content is changed or scanned.

The following diagram is offered to illustrate the placement of the host assessed relative to the network on which it is installed.



Conventions: Within this document, a number of typographical conventions have been employed to ensure differentiation of instructions and clarity of meaning. Instructions provided in `regular-weight monospaced font` are commands to be performed on a Unix host, or listings of files on a Unix host; in large blocks or scripts such instructions will be interspersed with annotations from the engineer, provided in *`italic monospaced font`*.

In addition, to ensure the safety of the Singing Beagle Productions network and the hosts mentioned herein, certain steps have been taken to sanitize the data presented. In particular, certain network numbers have been replaced: while the internal network (172.16.2.0 / 24) remains the same, the initial three octets of external network addresses have been edited as if the host actually were on the 192.168.X.X network. Thus, a host which might actually possess the address 1.2.3.4 would be noted herein as 192.168.3.4. In addition, usernames and GECOS entries have been replaced with sanitized values to protect the identity of users, although the UIDs and GIDs have not been cleaned, to allow the customer to back trace information presented to the actual files resident on the hosts in question.

Endnotes have been employed throughout, and can be found before the appendices at the end of the document; any questions regarding the information offered herein or the presentation thereof may be referred by email to `auditor@melete.org` .

Auditing Methodology:

I. General Methodology

Inspection of the host was conducted in three phases. Phase one consisted of network port sweeps and vulnerability scans, performed using a variety of publicly-available tools to assess which network services were running on the host, how much information could be gained from those services, and what vulnerabilities the daemons themselves or the services they offer might present to the host. This portion of the assessment was carried out from a laptop installed on the same network segment as the target host, in order to examine the security of the host itself. A scan of the host through the firewall, performed from the external network segment, was also conducted, to assess what services the firewall would allow through to the host.

The second phase of the assessment was host-based: the engineer was granted an unprivileged account and the root password to the host, which he used to login to the host from the internal network segment. Once logged in, the engineer accessed the root account and performed a thorough assessment of the host's configuration, including operating system version and patch level, daemons running and their configuration, and a limited assessment of the webserver running on the host. This was done both to examine the general security of the host's configuration and to verify that the host's setup matched its profile on the network: no ports were open from the network that did not appear open from the host, configuration files matched the actual behavior of the daemons they governed and so forth, as disjuncts between the two profiles might present evidence that a system compromise had occurred.

Finally, once the inspections of the host itself had concluded, the engineer conducted an inspection of the host's environment, including network layout, physical security measures, and interviews with systems administration personnel responsible for the server, to examine policies and procedures.

II. Tools Employed

a. Phase One: Network Security

Tools employed during this phase were publicly-available, open-source security scanners run from a Linux platform. A list of websites for downloading and obtaining more information about these tools is provided in Appendix B.

i. Nmap: nmap is a port scanner, used for obtaining a list of open ports on a target system. Scans performed obtained complete lists of open TCP and UDP ports (i.e. covering the complete range of port numbers from 1 to 65535), and connected to the RPC portmapper server and Ident daemon on the host to gather additional information about any open ports discovered. Additional plugins were utilized which obtained banners[i] from well-known services, reporting the banners for FTP, HTTP, SMTP, SSH and SunRPC services. In addition to standard full-connect TCP scanning (completing the SYN-SYN/ACK-ACK handshake and then tearing down the connection with FIN packets), a "half-open" TCP scan was performed (sending a SYN, receiving a SYN/ACK on an open port, and tearing down

the connection immediately with a RST), both to ensure that the lists of open ports were the same and for later correlation against system logs to examine how much activity was successfully logged.

ii. Nessus: To quote the website of the Nessus project, "The 'Nessus' Project aims to provide to the internet community a free, powerful, up-to-date and easy to use remote security scanner." Utilizing a built-in database of several hundred (543 at last count) known vulnerabilities, it performs a series of scans and attacks against the target host to see which attacks succeed, producing at the end a report of attacks to which the host is vulnerable. Since the target host is a production server identified as a critical asset, the most dangerous attacks, designed to verify the vulnerability of the host to a variety of denial of service attacks, were disabled to prevent loss of service.

iii. SAINT: Like Nessus, SAINT (System Administrator's Integrated Network Tool, according to its creators) is a network-based vulnerability scanner, descended from the popular SATAN network scanning tool. Although its database of known vulnerabilities is smaller than that of Nessus, it is broader, and covers specific, high-risk vulnerabilities (such as the SANS "Top Ten Internet Security Vulnerabilities") that can pose grave risk to a host. In addition, the reports generated by SAINT can be easier to comprehend, and the practice of running multiple vulnerability scanners can serve as a cross-check for vulnerabilities identified, as well as providing additional sources of information.

iv. Whisker and Malice: Since the customer identified the server in question as offering web services as part of its function, a pair of webserver vulnerability scanners were utilized to check for obvious risks. Whisker, written by rain forest puppy [sic], is a Perl-based scanner that employs a database of known webserver holes to scan a host, focusing on CGI vulnerabilities, and offers command-line switches to avoid Intrusion Detection Systems[ii]; Malice, authored by Natas, is similarly Perl-based but utilizes a larger database of both CGI and webserver configuration vulnerabilities.

b. Phase Two: Host Security

Assessing the security of a host from the "inside" (i.e. by directly logging in to it) poses a significant challenge to the responsible assessor. In order to obtain a clear picture of the operating environment of the host, the auditor must treat the host like a crime scene and disturb it as little as possible while observing and examining it: changes to the host will make it difficult to impossible to clearly define the state of the host's security, since it will be unclear what effect the auditor's changes have made to the host. Any changes which are made to the host's environment (and some, such as log entries, are inevitable), must be carefully noted, for liability's sake, if nothing else. Proceeding with that in mind, all login sessions on the host were performed utilizing the "script" program, which spawns a subshell and logs all

data printed to the screen during that shell session to a text file. This meant that any commands issued by the auditor could be allowed to print their output directly to the screen instead of being redirected to a file to be pushed back to the auditor's machine later, following the same principle of creating as little new data on the host as possible. In addition, the tools and programs used in this phase of the assessment were only those which existed on the host prior to examination: no new data was transferred to the host during the assessment. The list of commands below is truncated to include the most significant commands issued: a complete log of all sessions on the host can be found in Appendix C, "Raw Data".

i. 'ps -elf': Lists all running processes on the host
ii. 'uname -a': Prints the OS version and physical architecture of the machine
iii. 'eeprom security-mode': Reports the current settings for the password-protection feature of the Sparc hardware PROM.
iv. 'last': Prints a list of all the users who logged into the machine through remote login utilities such as ssh, telnet or rsh, on the physical console or through ftp
v. 'netstat -a': Reports the list of network ports in "listening" state (i.e. a daemon has bound to that port to offer a network service) and the list of established network connections, including TCP and UDP connections as well as local Unix domain sockets.
vi. 'rpcinfo -p': Lists information about RPC (Remote Procedure Call) daemons running and the ports to which they are bound.
vii. 'showrev -a': Prints out basic information about the host, including OS version, architecture version, and a list of patched to the OS installed, if any.
viii. 'dmesg': Prints the list of output produced by the system's last boot; performed principally to look for reported errors or misconfigurations.
ix. 'pkginfo': Prints out the list of software packages installed using Solaris' built-in software package system. This would not catch any software installed by hand-compiling it, such as the Apache webserver, but would catch software such as Check Point's firewall software, or the OpenWindows suite of graphical interface software.
x. A large number of files were opened and their contents printed using the 'cat' utility; these included a significant portion of the boot scripts and configuration files in /etc, as well as various other configuration and log files scattered throughout the filesystem.

c. Phase III: Environmental and Systemic Inspection

The "tools" used for this portion of the assessment were far more abstract. An inspection of the server room in which the host resides was carried out, followed by interviews with the administrators identified by the customer as responsible for the upkeep on the server. Although legal constraints prevent the inclusion of a verbatim transcript of these interviews, the list below

should serve as a guide to what was inspected; a checklist, completed by the auditor during the interview, provides the data examined for each point.

i. Physical Security:

1. Does the server reside in a server room with a generally clean (uncluttered, organized) and stable, climate-controlled environment, with temperature and humidity kept at constant, controlled levels?
2. Is access to the server room limited to a known number of people, and controlled through the use of a cipher-lock or badge reader at all access points?
3. Is there a computer-safe fire suppression system in place such as Halon-2 or similar systems?
4. Is the server stored securely in a rack and not stacked on a shelf underneath other units?
5. Is the server's CPU kept in a locked cabinet to control access to removable media drives?

ii. Systems Administrators: What is the overall level of Unix knowledge among those responsible for the administration of the server? What is their level of security knowledge? What are their specific responsibilities with regards to the host, and are those personally-developed or handed to them from company policy and standard procedure?

iii. Host Knowledge: Are the administrators able to list the services which should be/are running on the box without logging in to look? Is there a document stating the host's function made available and kept up to date? Is there an installation and configuration history document kept by the systems administrators to record changes to the host? What is the administrator's general impression of the security level and overall configuration of the host?

Analysis of Vulnerability:

I. <u>Operating System Vulnerabilities</u>

a. Unnecessary Software Installed: When building and installing a host which will act as a server, it is important to define the list of functions that host will perform, and then install only the software required to perform those functions. Installing additional software only offers attackers greater opportunity for mischief, and leads to greater administrative workload trying to keep all software on the server patched up to date, as the list of things to patch is proportionally longer. The simplest solution is to start from the basic set of packages, defined as the "Core Utilities", and install other packages on top of that as they are needed (some packages can and should be removed from Core Utilities as well on servers requiring higher levels of security, such as firewalls).

The list of packages installed on Kumo is extensive, and includes a number of software packages which are unnecessary. If the host is to stay in service as it is for any length of time, Melete would strongly recommend the removal of the following groups of packages post-haste if

they are not performing integral functions on the server:
[It is important to note that this is only a partial list, which includes many packages with known vulnerabilities. The customer is strongly urged to review the list of packages installed manually (using the "pkginfo" command) and uninstall any which do not meet the list of approved functions for the server. An entry followed by an asterisk (*) denotes a group of packages which match that expression.]

NSCPNav (Netscape Navigator)	SUNWdt* (CDE packages)
SUNWeu* (European locales for CDE)	SUNWi*of and SUNWi*rf (X11 fonts)
SUNWjv* (Java packages)	SUNWol* (OpenLook packages)
SUNWpcelx, SUNWpcm*, SUNWpcser (PCMCIA drivers)	SUNWplow* (OpenWindows Locales)
SUNWpm* (Power Management)	SUNWtltk* (ToolTalk)
SUNWxw* (X-Windows packages)	SUNWypr and SUNWypu (NIS packages)

b. Operating System Version: Although running the very latest version of an operating system can pose as many or more problems as a well-supported, slightly older revision, it is important to develop a policy for reviewing new releases and gradually moving older servers up to them or replacing them with units running newer versions. Newer versions of an OS can provide new security and auditing tools, fixes for problems in previous releases, and so forth; Melete recommends in general that customers stay no more than one major revision behind their software vendor, to avoid being caught by end-of-lifecycle problems and forced into premature upgrades.

While Solaris 2.6 continues to be supported by Sun, two major revisions of Solaris (7 and 8) have since been released and are in production in many facilities. Kumo continues to run version 2.6, and given the nonexistent list of patches installed (cf. "Security Patches" section below), is likely running an early version as well. The customer is strongly encouraged either to look at replacing Kumo with a new server running a fully-patched version of Solaris 7 or to schedule a time to upgrade Kumo at least to version 7; in addition, steps should be taken to begin reviewing Solaris 8 to see if it will meet the customer's needs, and testing it in a lab to make sure it will function as the customer requires.

II. Configuration Vulnerabilities

a. Sparc PROM Access Control: The Sparc platform for Solaris offers a command-line interactive PROM, used to configure hardware and select boot devices. The PROM offers three security levels, 'full', in which a password is required to be typed on the console in order to boot, reboot or reconfigure the machine through the PROM; 'command', in which the system will boot and reboot without prompting for the password, but will require the password for booting off of alternate media or using the

interactive PROM environment; and 'none', in which no password is required for any action. 'Command' mode is the recommended setting, which allows hosts to reboot unattended in emergencies, but keeps an attacker with console access from booting the system off of alternate media.

Currently, the PROM security mode is set to 'none', which means a determined attacker can boot the system off of alternate media, alter hardware settings and boot devices, and even render the host useless by changing the PROM password to an unknown setting and rebooting the machine. Since the PROM password and security mode can be set while the machine is booted (using the 'eeprom' command), this poses a significant risk to the system. The customer is urged to determine a PROM password for the system, set the password and security-mode, and consider disabling the 'eeprom' command on the host by removing or altering the permissions on it.

b. ToolTalk Database Server (rpc.ttdbserver): The ToolTalk database server, activated by default on Solaris, contains a known buffer overflow for which exploits have been widely distributed. On any secure system, it is generally an unwise idea to run any sort of RPC service at all; this service should be patched regardless, and either deactivated or very carefully monitored and firewalled.

   This service was found running on Kumo, and has a widely-known and recently-publicized exploit. The customer is strongly urged to apply the latest patch cluster for Solaris, or, if a single fix is needed, to apply the appropriate Sun patch to fix the exploit (105802), available from http://sunsolve.sun.com . To disable the service entirely, edit the `/etc/inetd.conf` file, and insert a # at the beginning of the line which begins "`100083/1 tli rpc/tcp`", then restart the inetd server by obtaining its PID ("`ps -elf | grep inetd`") and issuing a "`kill -HUP <PID>`" as root.

c. Direct Root Login: Many Unix systems offer the ability for users to login to the system directly as root from the network. Although Solaris does not offer this feature by default, it can be activated; Melete strongly recommends that it be left deactivated, and that users be actively prevented from logging in over the network, being forced instead to login as an unprivileged user and use a utility such as the built-in 'su' program to access the root account. Allowing direct root logins over the network allows an attacker a single point on which to concentrate her efforts: she need only break or guess the password for the root account, and she has gained access to the system, without needing to guess the username or the password of any unprivileged accounts. From a practical standpoint as well, forcing users to login with their own account first lends a measure of change control and auditing to the system, since any disastrous change can likely be back-traced to the user who executed 'su' last, simply by

reading the system logs.

Although Kumo has been configured not to allow direct root logins over ssh, root is still allowed to connect to the system through ftp, which would enable an attacker with the root password to alter files on the system, upload new files, and so forth. The customer is strongly urged to create an /etc/ftpusers file: any account names placed in this file will be prevented from logging in via FTP. It should contain "root", plus the names of any disabled or non-interactive accounts on the system, such as bin, dev, lp, and so forth.

d. TCP Wrappers: The TCP Wrappers package, authored by Wietse Venema, provides an additional layer of auditing and sanity checking for software such as telnet or ftp (TCP-based connection software). It offers granular access controls by IP address, and significant audit trails of what IPs connected to a server when and with what service, offering systems administrators a greater degree of security, especially when running services such as a public FTP server. This software is not installed by default on Solaris, but must be compiled on a secure system and distributed to servers, which must then have the /etc/inetd.conf file modified to use it.

   This package was not installed on Kumo, and definitely should be. Without it, administrators have no way to block out known wrongdoers, and a significantly reduced degree of auditing of FTP and login sessions. To install, download the software (URL is given in Appendix B) to a secure, non-production server, and compile it. Copy the resulting binaries to the production server, and then edit the /etc/inet/inetd.conf file to use the new "tcpd" server instead of any services, so a line that originally read

```
 ftp stream tcp nowait root /usr/sbin/in.ftpd in.ftpd
-l -a
```

   would now read

```
 ftp stream tcp nowait root /usr/sbin/tcpd in.ftpd -l
-a
```

e. Logging of Failed Logins: Although by default, Solaris' syslog configuration will log failed logins, the log to which it should write this information (/var/adm/loginlog) is not created by default, and so it will throw away information about failed logins with creating an audit trail. Creating such an audit trail is an integral part of a responsible system security policy, since without it, an attacker can attempt to break logins and passwords by brute-force without the systems administrators being aware of his activities.

   The necessary logfile for auditing failed logins on Solaris did not exist on Kumo, and the customer is strongly advised to create it and set it up in the log rotation scheme as soon as possible. To create the file, execute the following commands as root:

```
/bin/touch /var/adm/loginlog
```

```
/bin/chown root:sys /var/adm/loginlog
/bin/chmod 0600 /var/adm/loginlog
```

f. Log Review: The most valuable tool an administrator has in keeping her system secure is the system logs, which inform her of what connections were made, which users logged in, and so forth. It is vital to the security of a server that these logs be reviewed by hand periodically to search for anomalies; there is a wide variety of software available such as swatch or logcheck (URLs for both are in Appendix B) which will gather up logs and help sort out information before mailing the rest to systems admins for review.

Although webserver logs from Kumo are being parsed daily by a script and mailed to administrators, the system logs are not. This means that no one is examining who logs in to the system, what FTP sessions are conducted, and so forth. The customer is strongly urged to install one of the suggested log-checking packages such as swatch or logcheck and configure it to email its output to a systems administrator daily.

g. Central Log Host: One of the first actions an intruder will take upon successfully breaking into a system is to erase the logs, removing traces of the attack and the intruder's actions. One of the easiest ways to prevent this is to have the syslog daemon log additional copies of system log entries to another host on the network, which has been highly secured beforehand to prevent tampering, or to a lineprinter or similar device. In the event of a log anomaly, there is now a tamper-proof copy of system logs which will aid systems administrators in identifying the intruder and cleaning up the system.

No external logging was being performed on Kumo, which would leave systems administrators with much less information to work with in the case of a security incident. The customer is strongly encouraged to deploy either a network-based centralized log host, or else configure and attach a line-printer or similar device to Kumo for storing logs, and configure syslog to copy system log entries to it as appropriate.

III. Risks from Third-Party Software

a. FTP Server Version: Some effort appears to have been put into installing and configuring a copy of the Washington University FTP Server (wu-ftpd), which offers a significantly greater degree of control over FTP sessions, including locking off anonymous and guest sessions into `chroot`-ed jails, and automatically altering file permissions on uploaded files to prevent mischief. The version of the wu-ftpd server on Kumo, however, is version 2.4.1, which is many revisions behind the current version, 2.6.1. Versions prior to 2.6.1, in particular the 2.4.x series, contained numerous buffer overflow and string-format attacks which would give an attacker a root shell on the system or allow her to overwrite files on the disk; these attacks are well-known, and exploits to take advantage of them are widely distributed. The customer is strongly

encouraged, if further FTP service on this host serves their purpose, to upgrade the FTP server as soon as possible to the latest version, and keep track of development of the wu-ftpd server, to ensure that new versions are tested soon after they are released and installed on Kumo as soon as is practically possible.

b. Apache Server Version: Apache has had a generally good history from a security standpoint: a significant number of the previous releases of Apache have been issued to fix stability problems rather than actively exploitable security holes. Nonetheless, for a production webserver, stability can be as big an issue as security, and just as important (if not more so) a reason to perform regular upgrades.

   The version of Apache currently running on Kumo is XXXX, which is significantly behind the current stable version, 1.3.14. Moreover, version 1.3.14 was released to fix actively-exploitable security holes in the immediately-prior release (1.3.13), to which the version on Kumo is presently vulnerable. Melete recommends that the webserver on Kumo be upgraded to the latest stable version of Apache as soon as possible, to prevent attacks being perpetrated against the server.

c. Vulnerable CGI Scripts: One of the most prevalent vulnerabilities to which webservers are prone is badly coded CGI scripting, which can open enormous holes in a site's security easily, even through heavy firewalling.

   Although no formal code review was conducted, four separate security scanners run against Kumo produced no vulnerable CGI scripts. Melete would recommend that the customer perform an internal code audit of the CGI scripts on Kumo to ensure good programming practices have been followed.

d. SSH Server: Kumo employs Secure Shell (SSH) exclusively for remote administrative access, which is a good step and much to be commended. However, there are two flaws with the current SSH setup which put the system at risk, both of which are relatively simple fixes.

   First, the version of SSH running on Kumo is the "commercial" (www.ssh.com) version, rev. 1.2.21: this is significantly behind the current release, 1.2.30. Several of the intervening releases of SSH have been issued to fix known, exploitable security holes; the customer is strongly advised to upgrade to the latest version as soon as possible. Secondly, the server is currently configured to recognize and accept the use of .shosts files as an authentication method, which is significantly less secure than the use of RSA-style public/private keypairs. In the same spirit as deactivating .rhosts authentication on the host, .shosts should in a truly secure configuration be deactivated completely in favor of RSA keypairs (change the options "Rhosts Authentication" and "RhostsRSA Authentication" to "no" and "RSAAuthentication" to "yes" in the /etc/sshd_config file).

IV. Administrative Practices

a. Lack of Specific Administration: At the moment, no administrator is specifically tasked with maintenance on Kumo: the task falls to a group of individuals "as they get time". This poses a significant risk, paired with the lack of specific policy surrounding Kumo. Without specific policy dictating the actions administrators are responsible for performing and who is responsible for performing them, it is simply too easy for more clearly-defined priorities to overrule the periodic maintenance and upkeep of this system.

To remedy this, a specific list of responsibilities for Kumo and the periodic dates on which they need to be performed (first of the month, once per week, &c.) must be generated. This information must then be doled out to the appropriate administrative personnel so that an individual or (preferably) an individual with several backups and cross-checks is responsible for each item on the list.

V. Security Patches and so forth

a. No System Patches: Following the release of a version of Solaris, Sun will periodically distribute additional system patches which are meant to fix security vulnerabilities and correct program errors to improve the functionality of the system. These patches are distributed through http://sunsolve.sun.com, and are freely available to all. Especially given that many patches fix well-known security holes with widely-distributed exploits, keeping a system up to the latest patch revision level is part of the scope of any reasonable security program. This involves developing a policy that mandates keeping hosts up-to-date, and a set of procedures that dictate who is responsible for keeping track of new patches as they are released, and how those new patches will be downloaded, installed and tested on a non-production system, and then rolled out to a production environment in a timely and responsible fashion.

Kumo has no software patches installed, meaning the system was installed as is from the distribution media and put out on the network. This is highly dangerous: many of the other vulnerabilities to which Kumo is vulnerable would be solved if the appropriate patches were installed. Systems administrators should schedule downtime on Kumo as soon as possible, download the latest patch cluster for Solaris 2.6, and install it in single user mode.

VI. Data Handling

a. Insecure Data Handling: Given the sensitivity of the data stored on system backup tapes, it is absolutely imperative that backups be made using a strong encryption system with limited key access. Many commercial backup solutions will provide this with minimal reduction in performance, and the security of the resulting backups is well worth it. Especially when performing offsite backups, or in situations where backup tapes must be stored in insecure areas (i.e. not in a locked cabinet), utilization of encryption is a vital part of an enterprise backup scheme.

Kumo's backups are currently being written out without encryption, which would allow any attacker who obtained a system backup tape to read it, giving him access to sensitive company data and opportunities for system access through cracking passwords and obtaining valid usernames. As the customer develops their backup procedures and policies, encryption of backups must be an integral part of that design.

b. Insecure Media Handling: In addition to encryption of data stored on backup media, it is imperative that other avenues and channels of information outflow be carefully and rigorously controlled and sanitized. Hard drives sent to manufacturers for repair, system drives and tapes re-used in new machines and systems re-purposed or re-leased must all be carefully scrutinized by administrators and returned to a sterile state.

   Backup tapes from Kumo are routinely used in other systems through the Singing Beagle Productions enterprise, and on two occasions, disks from Kumo have been re-purposed into other systems without being purged, following upgrades. Singing Beagle Productions is urged to develop a secure media handling policy that mandates the erasure of all media being re-purposed or re-used, and the manual sanitization of all leased or re-purposed systems coming in or out of the enterprise.

c. File Integrity Checking: Given the prevalence of "rootkits" which will replace system binaries and libraries with booby-trapped or trojaned copies, it is absolutely vital that a baseline file integrity check be performed with software such as Tripwire, and that regular checks of the filesystem be performed against this baseline, to ensure no system files have been tampered with.

   At present, no such file integrity software is in use on Kumo; it should be a priority to implement such a system as soon as possible. Since no baseline was taken of Kumo prior to putting it into production, any current filesystem baseline must be considered no more than marginally trusted, however at least a current baseline would ensure that no files have changed from this point forward.

VII. Data Encryption

a. Login and System Remote Access: Despite their apparent usefulness for remote systems administration, remote access services such as telnet and the "r-commands" (rlogin, rsh, and rexec) suffer from the flaw of passing usernames, passwords, and all data during transactions in the clear over intervening networks. The Secure Shell (SSH) suite of software offers a drop-in replacement for all of these commands, and pipes all session data over an encrypted tunnel between client and server. In addition, stronger authentication mechanisms are provided for offering passwordless access or integration with one-time password schemes such as S/Key and OPIE.

   Kumo employs SSH exclusively, without offering telnet or r-services (all of which have been disabled to prevent bypassing SSH). Aside from

software upgrades (cf. "Risks from Third-Party Software", above), no further recommendations need be made here.

b. Secure Data on Insecure Protocols: The webserver on Kumo serves, among other functions, as a point for tracking customer information and trouble tickets, any or all of which could be considered sensitive data. While this data is protected with a reasonably well-designed password scheme, all usernames, passwords and transferred data pass in cleartext over the Internet between client and server.

Given the sensitivity of the data stored on the server and the client's expressed desire to run a tightly-secured system, it is Melete's recommendation that the existing Apache server be replaced with a server capable of running SSL (Secure Sockets Layer) transactions. The Apache + mod_ssl project distributes a freeware Apache version with SSL plugins; commercial variants from Covalent and C2 are also recommended, as is the Netscape iPlanet server.

VIII. Appropriate Access Restrictions

a. Physical Access: Despite all attempts to secure the console against malicious intrusions, the simple fact remains that a determined, skilled intruder with enough time and access to the physical console of a machine can gain access to the data on the disks, almost no matter what preventative measures are taken. To prevent this, it is imperative to store the CPU of the system in a secure facility: in a server room which offers badge-controlled access or cipherlocks, and preferably locked racks or cabinets inside for storing the CPU itself.

The physical access surrounding the console for Kumo was entirely unacceptable. Although inside an office with both access points controlled by cipherlocks, the door to the server room is right next to an entrance point, which would make it easy for an intruder to slip in after an employee. The door to the server room is unlocked and remains constantly open; there are no physical locks on the racks or the console itself to prevent physical tampering. All of this needs to be corrected as soon as possible: given the constant throughput of visitors, office staff and building workers, the protection of the physical console cannot be guaranteed, putting the entire system in jeopardy.

b. Electronic Access: Just as restricting the physical console of a server to a known set of trusted users increases the security of the system, so, too, does taking the same measures to protect access to the root account.

A. Legacy Accounts: One important step in retaining control of the root account on a system is user account lifecycle maintenance: removing old and legacy logins, locking unused user accounts and so forth. Kumo displayed a number of accounts from former employees which were not disabled, potentially leaving doors into the system for attacks both from disgruntled employees and from clever attackers breaking unwatched system accounts. The

removal of these accounts will greatly increase the security of the system, along with an immediate change of the root password to ensure former admins will not be able to gain access.

B. Granular Admin Restrictions: Not all administrators have the same level of knowledge, or require the same level of access, and by the same token, neither do all users. At the moment, the permissions on the `/sbin/su` file on Kumo are set to the default, which allows anyone on the system to access the root account if she knows the password. A first step towards reducing access to this would be to add known administrative accounts to an admin group such as "wheel", and change the permissions on the file to remove universal access. To do this, edit the /etc/group file and add known admin account names to the line which begins "wheel", separated by commas, then execute the following commands as root, which will restrict access appropriately:

```
/bin/chown root:wheel /sbin/su
/bin/chmod 4750 /sbin/su
```

[Note that if you later install the SUNWsutl package, which contains statically-linked binaries of system commands, you will need to perform the same restriction on `/sbin/su.static` .]

IX. Backup policies, disaster preparedness, &c.

a. No Backup Procedures: In order to protect both against malicious actions by intruders and hardware failures that could render a system unusable, it is essential for an organization to develop a firm backup policy and set of accompanying procedures that dictate how backups will be performed and when. This task must be handed to a systems administrator or group of administrators whose explicit responsibility it will be not only to perform the backups regularly, but to test the quality of the backups by attempting partial and full restores from backup tapes on a regular basis.

While there is a local tape drive on Kumo and associated scripts for performing backups, it is not the explicit responsibility of any administrator to perform this task; rather, it is performed "whenever significant change is made to the host", according to the administrators interviewed. In addition, there is no testing of backups, periodic or otherwise. These could leave the host in a disastrously vulnerable state should a hard drive fail or an intruder wipe the disks to prevent discovery. Melete's strong recommendation is that the customer perform an immediate review of backup policy and procedure, and begin implementing a sound backup strategy as soon as possible.

b. No Hardware Failure Provisions: Especially for systems defined as high-profile or mission-critical to a company, it is vital to have spare hardware onsite, preferably kept in warm standby (e.g. a spare host with daily-synchronized disks, ready to be substituted should the live host fail for any reason). This includes not just spare hard drives and memory

DIMMs, but also a spare system and potentially may extend to spare network hardware.

While spare hard drives could likely be scrounged from the lab in which Kumo is installed, such a procedure would be time-consuming, and would risk installing a piece of equipment with unknown filesystems on it and a potential for rapid failure. It is imperative that the customer purchase sufficient spare hardware for Kumo that a total systems failure could be sustained and the system would be back online rapidly. Should this prove difficult to budget for in the short term, there are companies such as Comdisco which will keep a copy of system backups and bring a copy of your host online within a short time should a failure occur.

X. Other issues

a. Firewalling: The importance of good firewalling cannot overshadow the importance of host-based security; a good firewall, however, can help supplement a site's security significantly.

After scanning Kumo through the site firewall (a Check Point Firewall-1 implementation), no unfiltered ports were discovered. This means the firewall is stateful, and is successfully checking each inbound connection against the state table to ensure that attackers may not bypass the firewall rulebase. The rulebase, however, includes a number of open ports which are not secure and should not be required for production service on Kumo. Open ports are listed below: ports surrounded with brackets ([]) should definitely be closed, and ports surrounded with parentheses () should be reviewed and closed if they are not required for the services Kumo provides.

Port	Service Name
21	FTP
22	SSH
(25)	(SMTP)
80	HTTP
[111]	[SunRPC / Portmapper]
[139]	[NetBIOS]
[6000]	[X-Windows]
[6112]	[DTSPC]
[7100]	[Font-service]
[32772]	[RPC]
[32773]	[RPC]
(33285)	[Unknown]
(33313)	(Unknown)

b.

Prioritized Risks:

Two lists of prioritized risks have been presented here: the first is the list which should be followed if Kumo is to be maintained online it its present state for any length

of time; the second is the list of errors to ensure are avoided should the customer opt to build a replacement server for Kumo. Obviously, building a secure replacement should start from a well-written and tested secure configuration document: good starting points are the Solaris Security FAQ, the "Hardening Solaris for Firewall-1" document online by Lance Spitzner, and of course the SANS Step-by-Step Guide to Securing Solaris. Items below have been annotated where needed; unannotated items are believed to be self-explanatory.

List 1: Risks in Current Configuration

1. No System Patches: Given the sheer number of security issues and stability fixes these provide, scheduling time to install the latest complete patch cluster from Sun must be the customer's first priority.
2. RPC ToolTalk Server: Apply the patch for this vulnerability and (preferably) disable the service entirely.
3. FTP and Apache Version Upgrades: Since these are public services offered through the firewall with known security exploits, these must be the next point of attack on the part of the customer. While upgrading Apache, the customer would be well-advised to install a webserver with SSL capabilities, either the freeware Apache+mod_ssl package or a similar commercial package. While upgrading the FTP software, the creation and stocking of an `/etc/ftpusers` file should be considered mandatory.
4. Legacy Accounts: Several of these are former systems administrators, who may have backdoors in the system. Locking off their accounts and renaming their home directories should be a sufficient step to keep them out until a new, clean system can be installed.
5. SSH Version: This is only marginally lower on the list, and should be considered a high priority, especially since upgrading to the latest version will require little more than compiling a new binary and installing it: the configuration files have not changed between 1.2.21 and 1.2.30.
6. TCP Wrappers: Especially given that the system is a public FTP server, installing TCP wrappers will be an important step to controlling access to resources and generating good logs of FTP sessions. As a bonus, SSH can be compiled with the TCP Wrapper libraries, allowing admins to control access to SSH as well through the same interface.
7. Log Review and Configuring Centralized Logging: These two go hand in hand--logs are currently not being reviewed, and will be much easier to review on a regular basis when they are concatenated to a single secure point, which will, in turn, ensure that the logs remain tamper-proof.
8. Filesystem Integrity Checking: Under any newly-implemented server, the use of filesystem integrity checking would be an absolute imperative early on in the implementation, then frequently and regularly thereafter. Since Kumo has already existed for some time without such software, any integrity checking software will only ensure that no changes are made from this point forward, which will provide some degree of security but is not quite as high on the list of priorities.

9. Physical Security: Since the outside perimeter of the office is at least partially secured, this will likely not prove a first avenue of attack on Kumo. Nonetheless, this issue needs to be dealt with in short order; this should include the configuration of secure console settings such as the PROM password and security mode.
10. Unecessary Software Installed: Although not currently posing active remote security risks, the list of software currently installed includes a number of packages with known local root exploits, which could hand control of the box over to a malicious trusted user. The customer would be well-advised to review the list of installed software as soon as possible, and test removing packages during maintenance windows until only required packages are installed.
11. Backup Procedures and Policies: A full backup of the system should be taken as soon as possible, and another one when the system has been more significantly secured. Singing Beagle Productions needs to institute a firm backup plan, as discussed above, and ensure that system backups are being carried out on a regular basis.
12. Granular Administration: Given the small number of actual administrators, this is not a high priority, but should definitely be an item on the list to complete. Administration of any server by more than one administrator is much easier when there are good records of what changed on a host and who changed it: mandating these log entries through the use of software such as sudo will improve the situation considerably.
13. Hardware Failure Preparedness / Disaster Preparedness
14. Specific Systems Administration Procedures and Policies; Determination of Responsibility for Enforcing Policy and Procedure

List 2: Risks to Avoid for Replacement Units:

1. OS Version: Any new implementation of this server configuration should definitely employ at least Solaris version 7, and version 8 should be considered (although it is not a requirement).
2. Unnecessary Software Installed: As stated above, beginning with a minimal configuration and adding onto it anything further which is required will ultimately result in a far more secure server than starting from too much software and paring things down.
3. No Software Patches: Immediately following a successful installation, the latest patch cluster from Sun must be installed for the host to be considered production-ready.
4. FTP/Apache/SSH Software Versions: Obviously, any new server installed should use the latest versions of this software; with the recent demise of the RSA Patent, Melete can find no reason not to recommend that any new Apache version installed be SSL-capable, even if such functionality is not immediately implemented.
5. TCP Wrappers

6. Centralized Logging and Log Review
7. Granular Administration Setup
8. Backups and Filesystem Integrity Checks: Immediately following the final configuration of the server but prior to putting it into production (preferably while not connected to any network), a "gold" backup must be performed on the new host. This backup should be retained through the life of the host and tested thoroughly: no matter what may occur to the rest of the backups or the host itself, this backup will provide a safe fallback to the initial implementation baseline. Hand in hand with this is a baseline using Tripwire or similar software: performing this baseline prior to connecting the host to a network will provide an absolute standard against which future filesystem checks can be verified to be sure no changes have been made.
9. Physical Security
10. Disaster Preparedness / Hardware Failure Preparedness
11. Specific Systems Administration Procedures and Policies; Determination of Responsibility for Enforcing Policy and Procedure

Costs Estimate

It is vital to remember that the following are purely estimates, and should be considered neither actual estimates or price quotes for services rendered by Melete nor anything more than conjecture.

Complete Repairs to Existing System:

$200 x 16 hours = $3200	Engineer billable time for repairs
$150 x 8 hours = $1200	Tech Writer billable time: document new system as installed and repaired
$150 x 40 hours = $6000	Tech Writer billable time: generate policy and procedure documents for new system
$10400	Total tangible expense for system repairs
2.5 - 3 hours	Total required system downtime for repairs, subdividable into smaller chunks: 1-1.5 hours - Install latest patch cluster 1-1.5 hours - Perform system level-0 "gold" backup and perform Tripwire integrity check .05 hours - Install latest Apache version[iii] .05 hours - Install latest wu-ftpd version[iv] .05 hours - Install latest SSH daemon[v] .05 hours - Install TCP Wrappers[vi]

Develop and Implement New System:

$200 x 24 hours = $4800	Engineer billable time for implementation

$150 x 4 hours = $600	Tech Writer billable time: document new system as installed[vii]
$150 x 40 hours = $6000	Tech Writer billable time: generate policy and procedure documents for new system
$11400	Total tangible expense for system repairs

Appendices

Appendix A: Suggested References in Print

1. Practical Unix and Internet Security (Garfinkel, Spafford. c. 1995 by O'Reilly and Associates, Inc., ISBN 1565921488)

   Although becoming somewhat dated, this is still one of the canonical guides to Unix security, and is worth every system administrator and security engineer's time.

2. Unix Systems Administration Handbook (Nemeth, & al. c. 2000 by Prentice Hall, ISBN 0130206016)

   Now in its third printing, this multi-platform guide to the world of systems administration offers, among other things, fantastic chapters on general system security, developing good systems administration policies and procedures, and maintaining good political relations as systems administrators dealing with the rest of the world.

3. Solaris Security: Step by Step (Pomeranz, & al. Published by the SANS Institute, www.sans.org)

   Written by the consensus of a large group of Solaris administrators and gurus, this is not only an excellent guide to creating a secure baseline Solaris install, but an excellent starting point for adapting to other Unix flavors.

4. Linux System Security: The Administrator's Guide to Open Source Security Tools (Mann, Mitchell. c. 1999 by Prentice Hall, ISBN 0130158070)

   A recent work, this serves as a good guide to implementing tools such as SSH and Tripwire, as well as tips for secure NFS implementations, general system security, and advanced topics such as varieties of the cryptographic filesystem and using ipchains for firewalling. Although Linux-focused, many of the tools quoted here will be readily adaptable to other platforms with little trouble; the guide is worth purchasing for the chapter on SSH alone (although it does not cover OpenSSH).

5. Hacking Exposed (Scambray, McClure, Kurtz. c. 2000 by Osborne/McGraw-Hill, ISBN 0072127481)

   Now in its second edition, this is a terrific guide to getting inside the mind of the average system intruder, which will in turn guide administrators towards finding the holes in their own networks. This is a good guide for more advanced, security-focused administrators, since it focuses less on simply probing the local network for vulnerabilities, and more on the skills of profiling networks and penetrating systems.

6. Essential System Administration (Frisch, Loukides (editor). c. 1995, O'Reilly and Associates, Inc., ISBN 1565921275)

   A bit due for a second edition, this is the other "bible" for systems administrators: an excellent guide to Unix in general.

7. Building Internet Firewalls (Zwicky, Cooper, Chapman. c. 2000, O'Reilly and Associates, Inc., ISBN 1565928717)

   Once the hosts are all secured, the next step is to work on firewalling to protect the entries and exits on the network, and take some of the load of

repelling intruders off of the servers. This is an excellent guide to firewalls, especially in it's new edition. Check out also the older Firewalls and Internet Security: Repelling the Wily Hacker (Cheswick, Bellovin, c. 1994 Addison Wesley Longman, Inc., ISBN 0201633574) and the newer Building Linux and OpenBSD Firewalls (Sonnenreich, Yates. c. 1999 Wiley, John and Sons, Inc., ISBN 0471353663), both excellent guides to furthering one's firewall education.

8. Network Intrusion Detection: An Analyst's Handbook (Northcutt, Novak, McLachlan. c. 2000, New Riders Publishing, ISBN 0735710082)
   For the advanced security-minded administrator, the next step is to begin watching the network proactively for attack, and there is no better guide to digging into that than this book. Can't be recommended highly enough.

Appendix B: Online Resources and Tools

URLs for further security information

- http://www.securityfocus.com : Home to the Bugtraq vulnerability discussion list and database, this has become one of the places to visit for security news, vulnerability information, tools, product guides and articles on Internet security and related topics.
- http://www.sans.org : Systems Administration and Network Security (SANS) Institute hosts periodic conferences throughout the U.S. and internationally, offering education and discussion of varied Internet security topics.
- http://www.cerias.purdue.edu : Although perhaps not as loudly thriving as their predecessor, COAST, the Center for Education and Research in Information Assurance and Security (CERIAS) continues to offer an excellent FTP archive of security tools and a wide variety of whitepapers, research projects, and interesting discussion on various topics within Internet security.
- http://www.cert.org : Somewhat overshadowed by Bugtraq these days because of their more conservative timeline for releasing security alerts, the CERT Coordination Center is nonetheless doing some excellent work concatenating cross-platform security vulnerabilities, educating administrators about trends in vulnerabilities, and encouraging the free flow of information about security and the threat from network attackers.

URLs for Unix Security and Systems Administration Tools:

- http://www.apache.org : Home of development on the Apache webserver; be sure also to visit www.modssl.org and www.openssl.org for information on building free, SSL-enabled Apache implementations.
- http://www.wu-ftpd.org : Site for development of the Washington University FTP daemon (wu-ftpd).
- http://www.psionic.com/abacus/logcheck : Site to visit for information about logcheck, a freeware log parser. Logcheck will parse through system logs, collect any information that does not match a set of known acceptable information, and mail the output to a systems administrator for review, thus significantly easing the job of periodic log review. An excellent tool.

- http://www.stanford.edu/~atkins/swatch : Swatch is the opposite of logcheck, although the two perform similar functions. Rather than discarding known goodness, swatch parses logs looking for predefined triggers, and sends alerts when it finds them. More flexible than logwatch, Swatch is capable of taking a number of different actions based on the triggers it finds and the configuration it has been given.
- http://www.insecure.org/nmap : Site for Nmap, the freeware Network Mapper written by Fyodor. A Swiss Army Knife of network scanning, nmap has plugins for TCP and UDP scanning, OS fingerprinting and detection, and further plugins from other authors offer version and vulnerability checking to boot.
- http://www.nessus.org : Site for the Nessus security scanner, used in this assessment (see discussion under "Tools" section of "Methodology").
- http://www.wwdsi.com : Home of the SAINT vulnerability scanner, also used in this assessment
- http://packetstorm.securify.com : Spanning the bridge between the "white hat" world of security professionals and the "black hat" world of intruders, PacketStorm offers a significant collection of "hacker tools", including the Malice and Whisker tools used in this assessment. The collection also includes a number of actual system exploits, useful for examination and comparison during a forensic examination.
- http://freshmeat.net : An excellent site for open-source (and some non-open-source) code of all kinds, Freshmeat offers a vast library of software, with a significant focus on Linux.
- ftp://ftp.porcupine.org/pub/security : Site to download Wietse Venema's TCP Wrappers program, mentioned several times in this document.
- http://www.enteract.com/~lspitz : Site of Lance Spitzner, a consultant and engineer for Sun Microsystems. Lance's pages contain a terrific collection of whitepapers on system security and checklists and hardening documents for Solaris and Linux.
- http://www.sunworld.com/sunworldonline/common/security-faq.html : The Solaris Security FAQ, while somewhat dated in places, is an excellent resource for shoring up the security of Solaris servers.

Appendix C: Raw Data Gathered

[Additional Note about Data Sanitation: In order to facilitate the processing of certain large collections of usernames, some usernames from accounts no longer present but verified as once having existed have been replaced as well. The logins on the system have been checked: no logins appeared in any system logs which had no corresponding entries at some point in the system configuration (which would indicate an intrusion).]

```
# nmap (V. 2.54BETA4) scan initiated Fri Nov 17 17:31:02 2000 as:
/usr/local/bin/nmap -sS -O -p 1-65535 -vv -oN nmap-synOS.log 172.16.2.1
Interesting ports on  (172.16.2.1):
```

```
(The 65523 ports scanned but not shown below are in state: closed)
Port       State       Service
21/tcp     open        ftp
22/tcp     open        ssh
25/tcp     open        smtp
80/tcp     open        http
111/tcp    open        sunrpc
6000/tcp   open        X11
6112/tcp   open        dtspc
7100/tcp   open        font-service
32772/tcp  open        sometimes-rpc7
32773/tcp  open        sometimes-rpc9
33285/tcp  open        unknown
33313/tcp  open        unknown

TCP Sequence Prediction: Class=random positive increments
                         Difficulty=39423 (Worthy challenge)

Sequence numbers: A89A690A A89AAB3E A89AE1D9 A89BA327 A89D77EB A89E9B59
Remote operating system guess: Solaris 2.6 - 2.7
OS Fingerprint:
TSeq(Class=RI%gcd=1%SI=99FF)
T1(Resp=Y%DF=Y%W=2297%ACK=S++%Flags=AS%Ops=NNTNWME)
T2(Resp=N)
T3(Resp=N)
T4(Resp=Y%DF=Y%W=0%ACK=O%Flags=R%Ops=)
T5(Resp=Y%DF=Y%W=0%ACK=S++%Flags=AR%Ops=)
T6(Resp=Y%DF=Y%W=0%ACK=O%Flags=R%Ops=)
T7(Resp=Y%DF=Y%W=0%ACK=S%Flags=AR%Ops=)
PU(Resp=Y%DF=Y%TOS=0%IPLEN=70%RIPTL=148%RID=E%RIPCK=E%UCK=E%ULEN=134%DAT=E)


# Nmap run completed at Fri Nov 17 17:31:41 2000 -- 1 IP address (1 host up)
scanned in 38 seconds

# nmap (V. 2.54BETA4) scan initiated Fri Nov 17 17:32:43 2000 as:
/usr/local/bin/nmap -sT -sR -I -p 1-65535 -vv -oN nmap-connectRPCIdent.log
172.16.2.1
Interesting ports on  (172.16.2.1):
(The 65523 ports scanned but not shown below are in state: closed)
Port       State       Service (RPC)       Owner
21/tcp     open        ftp
22/tcp     open        ssh
25/tcp     open        smtp
80/tcp     open        http
111/tcp    open        sunrpc (rpcbind V2-4)
6000/tcp   open        X11
6112/tcp   open        dtspc
7100/tcp   open        font-service
32772/tcp  open        sometimes-rpc7 (ttdbserverd V1)
32773/tcp  open        sometimes-rpc9
33285/tcp  open        (ttsession V1-4)
33313/tcp  open        (kcms_server V1)

# Nmap run completed at Fri Nov 17 17:33:05 2000 -- 1 IP address (1 host up)
scanned in 21 seconds
```

```
# nmap (V. 2.54BETA4) scan initiated Fri Nov 17 17:34:12 2000 as:
/usr/local/bin/nmap -sT -sV -FV -oN nmap-version.log 172.16.2.1
Interesting ports on  (172.16.2.1):
(The 23 ports scanned but not shown below are in state: closed)
Port       State       Service             Protocol     Version
21/tcp     open        ftp                 FTP          wu-2.4.2-academ[BETA-
16](1)
22/tcp     open        ssh                 SSH          1.5-1.2.21
25/tcp     open        smtp                SMTP
80/tcp     open        http                HTTP         Apache/1.2.6
mod_perl/1.10
111/tcp    open        sunrpc              RPC

# Nmap run completed at Fri Nov 17 17:34:29 2000 -- 1 IP address (1 host up)
scanned in 17 seconds

# nmap (V. 2.54BETA4) scan initiated Wed Nov 22 10:44:58 2000 as: nmap -sA -p
1-65535 -vv -oN nmap-ACK.log 192.168.56.129
All 65535 scanned ports on  (192.168.56.129) are: filtered
# Nmap run completed at Wed Nov 22 11:39:22 2000 -- 1 IP address (1 host up)
scanned in 3264 seconds

# nmap (V. 2.54BETA4) scan initiated Wed Nov 22 11:47:17 2000 as:
/usr/local/bin/nmap -sT -p 1-65535 -oN nmap-TCPthroughfire.log -vv
kumo.singingbeagle.org
Interesting ports on  (192.168.56.129):
(The 65522 ports scanned but not shown below are in state: closed)
Port       State       Service
21/tcp     open        ftp
22/tcp     open        ssh
25/tcp     open        smtp
80/tcp     open        http
111/tcp    open        sunrpc
139/tcp    filtered    netbios-ssn
6000/tcp   open        X11
6112/tcp   open        dtspc
7100/tcp   open        font-service
32772/tcp  open        sometimes-rpc7
32773/tcp  open        sometimes-rpc9
33285/tcp  open        unknown
33313/tcp  open        unknown

# Nmap run completed at Wed Nov 22 11:56:21 2000 -- 1 IP address (1 host up)
scanned in 543 seconds

Nessus Scan Report
------------------



SUMMARY

 - Number of hosts which were alive during the test : 1
 - Number of security holes found : 0
 - Number of security warnings found : 1
 - Number of security notes found : 0
```

```
TESTED HOSTS

 172.16.2.1 (Security warnings found)

DETAILS

+ 172.16.2.1 :
 . List of open ports :
   o unknown (32772/tcp) (Security warnings found)

 . Warning found on port unknown (32772/tcp)



    The tooltalk RPC service is running.
    An possible implementation fault in the
    ToolTalk object database server may allow a
    cracker to execute arbitrary commands as
    root.

    ** This warning may be a false
        positive since the presence
        of the bug was not tested **

    Solution : Disable this service.
    See also : CERT Advisory CA-98.11

    Risk factor : High
    CVE : CVE-1999-0003
```

Engineer's Note: Owing to the difficulties converting HTML into a Word doc, I have condensed the SAINT output page into plain text below, word-for-word. The EXPN and VRFY commands showed as activated, but in fact were not: the host runs SMAP from the Firewall Toolkit, which will respond positively to any EXPN or VRFY request whether the user account in question actually exists or not (thus giving out no information).

```
Results – 172.16.2.1

General Host Information
      Host type:  Solaris 2.6 – 2.7
      Subnet 172.16.2
      Scanning level: heavyplus
      Last scan:  Fri Nov 17 18:04:42 2000

Network Services:
      FTP server
      SMTP server
      SSH server
      WWW server
      X Windows server
      XDM (X login) server
      1/UDP server
      6112/TCP server
      7100/TCP server
      sunrpc server
```

```
Vulnerable Services:
      Sendmail command EXPN is enabled
      Sendmail command VRFY is enabled
      SSH-1.2.21\n is vulnerable
      [ Top 10 ] tooltalk version may be vulnerable to a buffer overflow (CVE
1999-0003)
```

Engineer's Note: This is the output from running the Whisker tool against 172.16.2.1. I also ran "Malice", which ran for a minute and a half, then returned that the site's security was such that it could find nothing wrong.

```
-- whisker / v1.4.0+SSL / rain forest puppy / www.wiretrip.net --
- Loaded script database of 2124 lines

= - = - = - = - = - =
= Host: 172.16.2.1
= Server: Apache/1.2.6 mod_perl/1.10

+ 404 File Not Found: GET /cfdocs/
+ 404 File Not Found: GET /scripts/
+ 404 File Not Found: GET /cfcache.map
+ 404 File Not Found: GET /cfide/Administrator/startstop.html
+ 404 File Not Found: GET /cfappman/index.cfm
+ 403 Forbidden: GET /cgi-bin/
+ 403 Forbidden: GET /cgi-bin/dbmlparser.exe
+ 404 File Not Found: HEAD /_vti_inf.html
+ 404 File Not Found: HEAD /_vti_pvt/
+ 403 Forbidden: HEAD /cgi-bin/webdist.cgi
+ 403 Forbidden: HEAD /cgi-bin/handler
+ 403 Forbidden: HEAD /cgi-bin/wrap
+ 403 Forbidden: HEAD /cgi-bin/pfdisplay.cgi
+ 403 Forbidden: HEAD /cgi-bin/MachineInfo
+ 404 File Not Found: HEAD /mall_log_files/order.log
+ 404 File Not Found: HEAD /PDG_Cart/
+ 404 File Not Found: HEAD /quikstore.cfg
+ 404 File Not Found: HEAD /orders/
+ 404 File Not Found: HEAD /Admin_files/order.log
+ 404 File Not Found: HEAD /WebShop/
+ 404 File Not Found: HEAD /pw/storemgr.pw
+ 404 File Not Found: HEAD /bigconf.cgi
+ 404 File Not Found: HEAD /icat
+ 403 Forbidden: HEAD /cgi-bin/icat
+ 404 File Not Found: HEAD /cgi-local/
+ 404 File Not Found: HEAD /htbin/
+ 404 File Not Found: HEAD /cgibin/
+ 404 File Not Found: HEAD /cgis/
+ 404 File Not Found: HEAD /cgi/
+ 404 File Not Found: HEAD /cgi-csc/
+ 404 File Not Found: HEAD /bin/
+ 404 File Not Found: HEAD /apps/
+ 403 Forbidden: HEAD /cgi-bin/flexform.cgi
+ 403 Forbidden: HEAD /cgi-bin/flexform
+ 403 Forbidden: HEAD /cgi-bin/LWGate
+ 403 Forbidden: HEAD /cgi-bin/lwgate
+ 403 Forbidden: HEAD /cgi-bin/LWGate.cgi
+ 403 Forbidden: HEAD /cgi-bin/lwgate.cgi
+ 404 File Not Found: HEAD /cgi-win/
+ 403 Forbidden: HEAD /cgi-bin/pu3.pl
```

```
+ 403 Forbidden: HEAD /cgi-bin/meta.pl
+ 403 Forbidden: HEAD /cgi-bin/day5datacopier.cgi
+ 403 Forbidden: HEAD /cgi-bin/webutils.pl
+ 403 Forbidden: HEAD /cgi-bin/tigvote.cgi
+ 403 Forbidden: HEAD /cgi-bin/tpgnrock
+ 403 Forbidden: HEAD /cgi-bin/webwho.pl
+ 403 Forbidden: HEAD /cgi-bin/form.cgi
+ 403 Forbidden: HEAD /cgi-bin/message.cgi
+ 403 Forbidden: HEAD /cgi-bin/.cobalt/siteUserMod/siteUserMod.cgi
+ 403 Forbidden: HEAD /cgi-bin/.fhp
+ 403 Forbidden: HEAD /cgi-bin/htsearch
+ 403 Forbidden: HEAD /cgi-bin/plusmail
+ 404 File Not Found: HEAD /manage/cgi/cgiproc
+ 403 Forbidden: HEAD /cgi-bin/ultraboard.cgi
+ 403 Forbidden: HEAD /cgi-bin/ultraboard.pl
+ 403 Forbidden: HEAD /cgi-bin/perlshop.cgi
+ 403 Forbidden: HEAD /cgi-bin/download.cgi
+ 403 Forbidden: HEAD /cgi-bin/bnbform.cgi
+ 403 Forbidden: HEAD /cgi-bin/bnbform
+ 403 Forbidden: HEAD /cgi-bin/cgi-lib.pl
+ 403 Forbidden: HEAD /cgi-bin/post_query
+ 403 Forbidden: HEAD /cgi-bin/upload.pl
+ 403 Forbidden: HEAD /cgi-bin/rwwwshell.pl
+ 403 Forbidden: HEAD /cgi-bin/nlog-smb.pl
+ 403 Forbidden: HEAD /cgi-bin/nlog-smb.cgi
+ 403 Forbidden: HEAD /cgi-bin/wwwboard/
+ 404 File Not Found: HEAD /wwwboard/
+ 403 Forbidden: HEAD /cgi-bin/wwwboard.pl
+ 403 Forbidden: HEAD /cgi-bin/wwwboard/wwwboard.pl
+ 403 Forbidden: HEAD /cgi-bin/wwwboard.cgi
+ 403 Forbidden: HEAD /cgi-bin/wwwboard/wwwboard.cgi
+ 404 File Not Found: HEAD /logs/
+ 404 File Not Found: HEAD /database/
+ 404 File Not Found: HEAD /databases/
+ 403 Forbidden: HEAD /cgi-bin/cachemgr.cgi
+ 404 File Not Found: HEAD /.htaccess
+ 403 Forbidden: HEAD /cgi-bin/.htaccess
+ 404 File Not Found: HEAD /docs/
+ 403 Forbidden: HEAD /~root/
+ 403 Forbidden: HEAD /cgi-bin/htgrep.cgi
+ 403 Forbidden: HEAD /cgi-bin/htgrep
+ 404 File Not Found: HEAD /ws_ftp.ini
+ 403 Forbidden: HEAD /cgi-bin/ws_ftp.ini
+ 404 File Not Found: HEAD /WS_FTP.ini
+ 403 Forbidden: HEAD /cgi-bin/WS_FTP.ini
+ 403 Forbidden: HEAD /cgi-bin/ax-admin.cgi
+ 403 Forbidden: HEAD /cgi-bin/axs.cgi
+ 403 Forbidden: HEAD /cgi-bin/responder.cgi
+ 403 Forbidden: HEAD /cgi-bin/w3-sql
+ 404 File Not Found: HEAD /search97.vts
+ 404 File Not Found: HEAD /search.vts
+ 404 File Not Found: HEAD /search97cgi/s97_cgi
+ 403 Forbidden: HEAD /cgi-bin/unlg1.1
+ 403 Forbidden: HEAD /cgi-bin/unlg1.2
+ 403 Forbidden: HEAD /cgi-bin/gH.cgi
+ 403 Forbidden: HEAD /cgi-bin/test-cgi
+ 403 Forbidden: HEAD /cgi-bin/campas
```

```
+ 403 Forbidden: HEAD /cgi-bin/www-sql
+ 403 Forbidden: HEAD /cgi-bin/w3-msql
+ 403 Forbidden: HEAD /cgi-bin/view-source
+ 403 Forbidden: HEAD /cgi-bin/add_ftp.cgi
+ 403 Forbidden: HEAD /cgi-bin/cgiwrap
+ 403 Forbidden: HEAD /cgi-bin/guestbook.cgi
+ 403 Forbidden: HEAD /cgi-bin/guestbook.pl
+ 403 Forbidden: HEAD /cgi-bin/edit.pl
+ 403 Forbidden: HEAD /cgi-bin/webbbs.cgi
+ 403 Forbidden: HEAD /cgi-bin/whois_raw.cgi
+ 404 File Not Found: HEAD /webcart/
+ 404 File Not Found: HEAD /webcart-lite/
+ 403 Forbidden: HEAD /cgi-bin/AnyBoard.cgi
+ 403 Forbidden: HEAD /cgi-bin/admin.php
+ 403 Forbidden: HEAD /cgi-bin/code.php
+ 403 Forbidden: HEAD /cgi-bin/dumpenv.pl
+ 403 Forbidden: HEAD /cgi-bin/admin.php3
+ 403 Forbidden: HEAD /cgi-bin/code.php3
+ 403 Forbidden: HEAD /cgi-bin/login.cgi
+ 403 Forbidden: HEAD /cgi-bin/login.pl
+ 404 File Not Found: HEAD /reviews/newpro.cgi
+ 404 File Not Found: HEAD /piranha/secure/passwd.php3
+ 403 Forbidden: HEAD /cgi-bin/sojourn.cgi
+ 403 Forbidden: HEAD /cgi-bin/dfire.cgi
+ 403 Forbidden: HEAD /cgi-bin/spin_client.cgi
+ 403 Forbidden: HEAD /cgi-bin/Count.cgi
+ 403 Forbidden: HEAD /cgi-bin/stats.prf
+ 403 Forbidden: HEAD /cgi-bin/statsconfig
+ 404 File Not Found: HEAD /srchadm
+ 403 Forbidden: HEAD /cgi-bin/count.cgi
+ 404 File Not Found: HEAD /users/scripts/submit.cgi
+ 403 Forbidden: HEAD /cgi-bin/nph-test-cgi
+ 403 Forbidden: HEAD /cgi-bin/webgais
+ 403 Forbidden: HEAD /cgi-bin/websendmail
+ 403 Forbidden: HEAD /cgi-bin/bb-hist.sh
+ 404 File Not Found: HEAD /bb-dnbd/
+ 403 Forbidden: HEAD /cgi-bin/faxsurvey
+ 403 Forbidden: HEAD /cgi-bin/htmlscript
+ 403 Forbidden: HEAD /cgi-bin/aglimpse
+ 403 Forbidden: HEAD /cgi-bin/glimpse
+ 403 Forbidden: HEAD /cgi-bin/man.sh
+ 403 Forbidden: HEAD /cgi-bin/architext_query.pl
+ 403 Forbidden: HEAD /cgi-bin/architext_query.cgi
+ 403 Forbidden: HEAD /cgi-bin/excite
+ 403 Forbidden: HEAD /cgi-bin/getdoc.cgi
+ 403 Forbidden: HEAD /cgi-bin/webplus
+ 403 Forbidden: HEAD /cgi-bin/bizdb1-search.cgi
+ 403 Forbidden: HEAD /cgi-bin/cart.pl
+ 403 Forbidden: HEAD /cgi-bin/filemail.pl
+ 403 Forbidden: HEAD /cgi-bin/filemail
+ 403 Forbidden: HEAD /cgi-bin/php.cgi
+ 403 Forbidden: HEAD /cgi-bin/jj
+ 403 Forbidden: HEAD /cgi-bin/info2www
+ 403 Forbidden: HEAD /cgi-bin/nph-publish
+ 403 Forbidden: HEAD /cgi-bin/ax.cgi
+ 404 File Not Found: HEAD /session/admnlogin
+ 403 Forbidden: HEAD /cgi-bin/rpm_query
```

```
+ 403 Forbidden: HEAD /cgi-bin/AnyForm2
+ 403 Forbidden: HEAD /cgi-bin/AnyForm
+ 403 Forbidden: HEAD /cgi-bin/textcounter.pl
+ 403 Forbidden: HEAD /cgi-bin/wwwthreads/
+ 404 File Not Found: HEAD /wwwthreads/
+ 403 Forbidden: HEAD /cgi-bin/wwwthreads/w3tvars.pm
+ 403 Forbidden: HEAD /cgi-bin/wwwthreads/3tvars.pm
+ 403 Forbidden: HEAD /cgi-bin/classified.cgi
+ 403 Forbidden: HEAD /cgi-bin/classifieds.cgi
+ 403 Forbidden: HEAD /cgi-bin/classifieds
+ 404 File Not Found: HEAD /ss.cfg
+ 404 File Not Found: HEAD /ncl_items.html
+ 403 Forbidden: HEAD /cgi-bin/survey.cgi
+ 403 Forbidden: HEAD /cgi-bin/survey
+ 404 File Not Found: HEAD /test/test.cgi
+ 403 Forbidden: HEAD /cgi-bin/search.cgi
+ 403 Forbidden: HEAD /cgi-bin/c_download.cgi
+ 403 Forbidden: HEAD /cgi-bin/ntitar.pl
+ 403 Forbidden: HEAD /cgi-bin/enter.cgi
+ 403 Forbidden: HEAD /cgi-bin/dig.cgi
+ 403 Forbidden: HEAD /cgi-bin/tidfinder.cgi
+ 403 Forbidden: HEAD /cgi-bin/tablebuild.pl
+ 403 Forbidden: HEAD /cgi-bin/displayTC.pl
+ 403 Forbidden: HEAD /cgi-bin/dasp/fm_shell.asp
+ 403 Forbidden: HEAD /cgi-bin/printenv
+ 403 Forbidden: HEAD /cgi-bin/environ.cgi
+ 403 Forbidden: HEAD /cgi-bin/session/adminlogin
+ 403 Forbidden: HEAD /cgi-bin/finger
+ 403 Forbidden: HEAD /cgi-bin/finger.pl
+ 403 Forbidden: HEAD /cgi-bin/finger.cgi
+ 403 Forbidden: HEAD /cgi-bin/maillist.pl
+ 403 Forbidden: HEAD /cgi-bin/maillist.cgi
+ 403 Forbidden: HEAD /cgi-bin/sh
+ 403 Forbidden: HEAD /cgi-bin/bash
+ 403 Forbidden: HEAD /cgi-bin/ash
+ 403 Forbidden: HEAD /cgi-bin/tcsh
+ 403 Forbidden: HEAD /cgi-bin/ksh
+ 403 Forbidden: HEAD /cgi-bin/csh
+ 403 Forbidden: HEAD /cgi-bin/rksh
+ 403 Forbidden: HEAD /cgi-bin/rsh
+ 403 Forbidden: HEAD /cgi-bin/zsh
+ 403 Forbidden: HEAD /cgi-bin/perl
+ 403 Forbidden: HEAD /cgi-bin/test-cgi.tcl
+ 404 File Not Found: HEAD /php/
+ 404 File Not Found: HEAD /mlog.phtml
+ 403 Forbidden: HEAD /cgi-bin/mlog.phtml
+ 404 File Not Found: HEAD /mylog.phtml
+ 403 Forbidden: HEAD /cgi-bin/mylog.phtml
+ 404 File Not Found: HEAD /HyperStat/stat_what.log
+ 404 File Not Found: HEAD /Stats/
+ 404 File Not Found: HEAD /WebTrend/
+ 404 File Not Found: HEAD /analog/
+ 404 File Not Found: HEAD /cache-stats/
+ 404 File Not Found: HEAD /easylog/easylog.html
+ 404 File Not Found: HEAD /hit_tracker/
+ 404 File Not Found: HEAD /hitmatic/
+ 404 File Not Found: HEAD /hitmatic/analyse.cgi
```

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+ 404 File Not Found: HEAD /hyperstat/stat_what.log
+ 404 File Not Found: HEAD /log/
+ 404 File Not Found: HEAD /logfile/
+ 404 File Not Found: HEAD /logfiles/
+ 404 File Not Found: HEAD /logger/
+ 404 File Not Found: HEAD /logging/
+ 404 File Not Found: HEAD /logs/access_log
+ 404 File Not Found: HEAD /ministats/admin.cgi
+ 404 File Not Found: HEAD /scripts/weblog
+ 404 File Not Found: HEAD /server_stats/
+ 404 File Not Found: HEAD /stat/
+ 404 File Not Found: HEAD /statistics/
+ 404 File Not Found: HEAD /stats/
+ 404 File Not Found: HEAD /super_stats/access_logs
+ 404 File Not Found: HEAD /trafficlog/
+ 404 File Not Found: HEAD /ustats/
+ 404 File Not Found: HEAD /w3perl/admin
+ 404 File Not Found: HEAD /webaccess/access-options.txt
+ 404 File Not Found: HEAD /weblog/
+ 404 File Not Found: HEAD /weblogs/
+ 404 File Not Found: HEAD /webstats/
+ 404 File Not Found: HEAD /wstats/
+ 404 File Not Found: HEAD /wusage/
+ 404 File Not Found: HEAD /wwwlog/
+ 404 File Not Found: HEAD /wwwstats/
+ 404 File Not Found: HEAD /access-log
+ 404 File Not Found: HEAD /access.log
+ 404 File Not Found: HEAD /awebvisit.stat
+ 404 File Not Found: HEAD /dan_o.dat
+ 404 File Not Found: HEAD /hits.txt
+ 404 File Not Found: HEAD /log.htm
+ 404 File Not Found: HEAD /log.html
+ 404 File Not Found: HEAD /log.txt
+ 404 File Not Found: HEAD /logfile
+ 404 File Not Found: HEAD /logfile.htm
+ 404 File Not Found: HEAD /logfile.html
+ 404 File Not Found: HEAD /logfile.txt
+ 404 File Not Found: HEAD /logger.html
+ 404 File Not Found: HEAD /stat.htm
+ 404 File Not Found: HEAD /stats.htm
+ 404 File Not Found: HEAD /stats.html
+ 404 File Not Found: HEAD /stats.txt
+ 404 File Not Found: HEAD /webaccess.htm
+ 404 File Not Found: HEAD /wwwstats.html
+ 403 Forbidden: HEAD /cgi-bin/log/
+ 403 Forbidden: HEAD /cgi-bin/log/nether-log.pl?checkit
+ 403 Forbidden: HEAD /cgi-bin/logs/
+ 403 Forbidden: HEAD /cgi-bin/stat/
+ 403 Forbidden: HEAD /cgi-bin/stats.pl
+ 403 Forbidden: HEAD /cgi-bin/stats/
+ 403 Forbidden: HEAD /cgi-bin/clickcount.pl?view=test
+ 403 Forbidden: HEAD /cgi-bin/cstat.pl
+ 403 Forbidden: HEAD /cgi-bin/ex-logger.pl
+ 403 Forbidden: HEAD /cgi-bin/hitview.cgi
+ 403 Forbidden: HEAD /cgi-bin/log-reader.cgi
+ 403 Forbidden: HEAD /cgi-bin/logit.cgi
+ 403 Forbidden: HEAD /cgi-bin/logs.pl
```

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+ 403 Forbidden: HEAD /cgi-bin/lookwho.cgi
+ 403 Forbidden: HEAD /cgi-bin/mini_logger.cgi
+ 403 Forbidden: HEAD /cgi-bin/ratlog.cgi
+ 403 Forbidden: HEAD /cgi-bin/robadmin.cgi
+ 403 Forbidden: HEAD /cgi-bin/show.pl
+ 403 Forbidden: HEAD /cgi-bin/stats-bin-p/reports/index.html
+ 403 Forbidden: HEAD /cgi-bin/statview.pl
+ 403 Forbidden: HEAD /cgi-bin/viewlogs.pl
+ 403 Forbidden: HEAD /cgi-bin/wwwstats.pl
+ 404 File Not Found: HEAD /admin/
+ 404 File Not Found: HEAD /Admin_files/
+ 404 File Not Found: HEAD /DMR/
+ 404 File Not Found: HEAD /StoreDB/
+ 404 File Not Found: HEAD /Web_store/
+ 404 File Not Found: HEAD /access/
+ 404 File Not Found: HEAD /account/
+ 404 File Not Found: HEAD /accounting/
+ 404 File Not Found: HEAD /administrator/
+ 404 File Not Found: HEAD /app/
+ 404 File Not Found: HEAD /archive/
+ 404 File Not Found: HEAD /asp/
+ 404 File Not Found: HEAD /atc/
+ 404 File Not Found: HEAD /backup/
+ 404 File Not Found: HEAD /bak/
+ 404 File Not Found: HEAD /beta/
+ 404 File Not Found: HEAD /buy/
+ 404 File Not Found: HEAD /buynow/
+ 404 File Not Found: HEAD /c/
+ 404 File Not Found: HEAD /cart/
+ 404 File Not Found: HEAD /ccard/
+ 404 File Not Found: HEAD /config/
+ 404 File Not Found: HEAD /counter/
+ 404 File Not Found: HEAD /credit/
+ 404 File Not Found: HEAD /customers/
+ 404 File Not Found: HEAD /dat/
+ 404 File Not Found: HEAD /data/
+ 404 File Not Found: HEAD /db/
+ 404 File Not Found: HEAD /dbase/
+ 404 File Not Found: HEAD /doc-html/
+ 404 File Not Found: HEAD /down/
+ 404 File Not Found: HEAD /download/
+ 404 File Not Found: HEAD /downloads/
+ 404 File Not Found: HEAD /employees/
+ 404 File Not Found: HEAD /exe/
+ 404 File Not Found: HEAD /file/
+ 404 File Not Found: HEAD /files/
+ 404 File Not Found: HEAD /forum/
+ 404 File Not Found: HEAD /fpadmin/
+ 404 File Not Found: HEAD /ftp/
+ 404 File Not Found: HEAD /guestbook/
+ 404 File Not Found: HEAD /guests/
+ 404 File Not Found: HEAD /home/
+ 404 File Not Found: HEAD /htdocs/
+ 404 File Not Found: HEAD /html/
+ 404 File Not Found: HEAD /ibill/
+ 404 File Not Found: HEAD /idea/
+ 404 File Not Found: HEAD /ideas/
```

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+ 404 File Not Found: HEAD /incoming/
+ 404 File Not Found: HEAD /info/
+ 404 File Not Found: HEAD /install/
+ 404 File Not Found: HEAD /intranet/
+ 404 File Not Found: HEAD /jave/
+ 404 File Not Found: HEAD /jdbc/
+ 404 File Not Found: HEAD /lib/
+ 404 File Not Found: HEAD /library/
+ 404 File Not Found: HEAD /login/
+ 404 File Not Found: HEAD /mail/
+ 404 File Not Found: HEAD /mall_log_files/
+ 404 File Not Found: HEAD /manual/
+ 404 File Not Found: HEAD /marketing/
+ 404 File Not Found: HEAD /msql/
+ 404 File Not Found: HEAD /new/
+ 404 File Not Found: HEAD /odbc/
+ 404 File Not Found: HEAD /old/
+ 404 File Not Found: HEAD /oracle/
+ 404 File Not Found: HEAD /order/
+ 404 File Not Found: HEAD /outgoing/
+ 404 File Not Found: HEAD /pages/
+ 404 File Not Found: HEAD /passwords/
+ 404 File Not Found: HEAD /perl/
+ 404 File Not Found: HEAD /private/
+ 404 File Not Found: HEAD /pub/
+ 404 File Not Found: HEAD /public/
+ 404 File Not Found: HEAD /purchase/
+ 404 File Not Found: HEAD /purchases/
+ 404 File Not Found: HEAD /pw/
+ 404 File Not Found: HEAD /register/
+ 404 File Not Found: HEAD /registered/
+ 404 File Not Found: HEAD /reseller/
+ 404 File Not Found: HEAD /retail/
+ 404 File Not Found: HEAD /root/
+ 404 File Not Found: HEAD /sales/
+ 404 File Not Found: HEAD /search/
+ 404 File Not Found: HEAD /sell/
+ 404 File Not Found: HEAD /setup/
+ 404 File Not Found: HEAD /shop/
+ 404 File Not Found: HEAD /shopper/
+ 404 File Not Found: HEAD /site/iissamples/
+ 404 File Not Found: HEAD /software/
+ 404 File Not Found: HEAD /source/
+ 404 File Not Found: HEAD /sql/
+ 404 File Not Found: HEAD /store/
+ 404 File Not Found: HEAD /support/
+ 404 File Not Found: HEAD /temp/
+ 404 File Not Found: HEAD /test/
+ 404 File Not Found: HEAD /test-cgi/
+ 404 File Not Found: HEAD /tmp/
+ 200 OK: HEAD /tools/
+ 404 File Not Found: HEAD /tree/
+ 404 File Not Found: HEAD /updates/
+ 404 File Not Found: HEAD /usage/
+ 404 File Not Found: HEAD /user/
+ 404 File Not Found: HEAD /users/
+ 404 File Not Found: HEAD /web/
```

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+ 404 File Not Found: HEAD /web800fo/
+ 404 File Not Found: HEAD /webadmin/
+ 404 File Not Found: HEAD /webboard/
+ 404 File Not Found: HEAD /webdata/
+ 404 File Not Found: HEAD /website/
+ 404 File Not Found: HEAD /www/
+ 404 File Not Found: HEAD /www-sql/
+ 404 File Not Found: HEAD /wwwjoin/
+ 404 File Not Found: HEAD /import/
+ 404 File Not Found: HEAD /zipfiles/
+ 404 File Not Found: HEAD /password.htm
+ 403 Forbidden: HEAD /cgi-bin/password.htm
+ 404 File Not Found: HEAD /password.html
+ 403 Forbidden: HEAD /cgi-bin/password.html
+ 404 File Not Found: HEAD /password.dat
+ 403 Forbidden: HEAD /cgi-bin/password.dat
+ 404 File Not Found: HEAD /password.data
+ 403 Forbidden: HEAD /cgi-bin/password.data
+ 404 File Not Found: HEAD /password.txt
+ 403 Forbidden: HEAD /cgi-bin/password.txt
+ 404 File Not Found: HEAD /password.asp
+ 403 Forbidden: HEAD /cgi-bin/password.asp
+ 404 File Not Found: HEAD /password.dbf
+ 403 Forbidden: HEAD /cgi-bin/password.dbf
+ 404 File Not Found: HEAD /password.ini
+ 403 Forbidden: HEAD /cgi-bin/password.ini
+ 404 File Not Found: HEAD /password.db
+ 403 Forbidden: HEAD /cgi-bin/password.db
+ 404 File Not Found: HEAD /password.cfg
+ 403 Forbidden: HEAD /cgi-bin/password.cfg
+ 404 File Not Found: HEAD /password.exe
+ 403 Forbidden: HEAD /cgi-bin/password.exe
+ 404 File Not Found: HEAD /password.htx
+ 403 Forbidden: HEAD /cgi-bin/password.htx
+ 404 File Not Found: HEAD /password.lst
+ 403 Forbidden: HEAD /cgi-bin/password.lst
+ 404 File Not Found: HEAD /password.cgi
+ 403 Forbidden: HEAD /cgi-bin/password.cgi
+ 404 File Not Found: HEAD /password.pl
+ 403 Forbidden: HEAD /cgi-bin/password.pl
+ 404 File Not Found: HEAD /password.php3
+ 403 Forbidden: HEAD /cgi-bin/password.php3
+ 404 File Not Found: HEAD /passwords.htm
+ 403 Forbidden: HEAD /cgi-bin/passwords.htm
+ 404 File Not Found: HEAD /passwords.html
+ 403 Forbidden: HEAD /cgi-bin/passwords.html
+ 404 File Not Found: HEAD /passwords.dat
+ 403 Forbidden: HEAD /cgi-bin/passwords.dat
+ 404 File Not Found: HEAD /passwords.data
+ 403 Forbidden: HEAD /cgi-bin/passwords.data
+ 404 File Not Found: HEAD /passwords.txt
+ 403 Forbidden: HEAD /cgi-bin/passwords.txt
+ 404 File Not Found: HEAD /passwords.asp
+ 403 Forbidden: HEAD /cgi-bin/passwords.asp
+ 404 File Not Found: HEAD /passwords.dbf
+ 403 Forbidden: HEAD /cgi-bin/passwords.dbf
+ 404 File Not Found: HEAD /passwords.ini
```

```
+ 403 Forbidden: HEAD /cgi-bin/passwords.ini
+ 404 File Not Found: HEAD /passwords.db
+ 403 Forbidden: HEAD /cgi-bin/passwords.db
+ 404 File Not Found: HEAD /passwords.cfg
+ 403 Forbidden: HEAD /cgi-bin/passwords.cfg
+ 404 File Not Found: HEAD /passwords.exe
+ 403 Forbidden: HEAD /cgi-bin/passwords.exe
+ 404 File Not Found: HEAD /passwords.htx
+ 403 Forbidden: HEAD /cgi-bin/passwords.htx
+ 404 File Not Found: HEAD /passwords.lst
+ 403 Forbidden: HEAD /cgi-bin/passwords.lst
+ 404 File Not Found: HEAD /passwords.cgi
+ 403 Forbidden: HEAD /cgi-bin/passwords.cgi
+ 404 File Not Found: HEAD /passwords.pl
+ 403 Forbidden: HEAD /cgi-bin/passwords.pl
+ 404 File Not Found: HEAD /passwords.php3
+ 403 Forbidden: HEAD /cgi-bin/passwords.php3
+ 404 File Not Found: HEAD /pass.htm
+ 403 Forbidden: HEAD /cgi-bin/pass.htm
+ 404 File Not Found: HEAD /pass.html
+ 403 Forbidden: HEAD /cgi-bin/pass.html
+ 404 File Not Found: HEAD /pass.dat
+ 403 Forbidden: HEAD /cgi-bin/pass.dat
+ 404 File Not Found: HEAD /pass.data
+ 403 Forbidden: HEAD /cgi-bin/pass.data
+ 404 File Not Found: HEAD /pass.txt
+ 403 Forbidden: HEAD /cgi-bin/pass.txt
+ 404 File Not Found: HEAD /pass.asp
+ 403 Forbidden: HEAD /cgi-bin/pass.asp
+ 404 File Not Found: HEAD /pass.dbf
+ 403 Forbidden: HEAD /cgi-bin/pass.dbf
+ 404 File Not Found: HEAD /pass.ini
+ 403 Forbidden: HEAD /cgi-bin/pass.ini
+ 404 File Not Found: HEAD /pass.db
+ 403 Forbidden: HEAD /cgi-bin/pass.db
+ 404 File Not Found: HEAD /pass.cfg
+ 403 Forbidden: HEAD /cgi-bin/pass.cfg
+ 404 File Not Found: HEAD /pass.exe
+ 403 Forbidden: HEAD /cgi-bin/pass.exe
+ 404 File Not Found: HEAD /pass.htx
+ 403 Forbidden: HEAD /cgi-bin/pass.htx
+ 404 File Not Found: HEAD /pass.lst
+ 403 Forbidden: HEAD /cgi-bin/pass.lst
+ 404 File Not Found: HEAD /pass.cgi
+ 403 Forbidden: HEAD /cgi-bin/pass.cgi
+ 404 File Not Found: HEAD /pass.pl
+ 403 Forbidden: HEAD /cgi-bin/pass.pl
+ 404 File Not Found: HEAD /pass.php3
+ 403 Forbidden: HEAD /cgi-bin/pass.php3
+ 404 File Not Found: HEAD /users.htm
+ 403 Forbidden: HEAD /cgi-bin/users.htm
+ 404 File Not Found: HEAD /users.html
+ 403 Forbidden: HEAD /cgi-bin/users.html
+ 404 File Not Found: HEAD /users.dat
+ 403 Forbidden: HEAD /cgi-bin/users.dat
+ 404 File Not Found: HEAD /users.data
+ 403 Forbidden: HEAD /cgi-bin/users.data
```

```
+ 404 File Not Found: HEAD /users.txt
+ 403 Forbidden: HEAD /cgi-bin/users.txt
+ 404 File Not Found: HEAD /users.asp
+ 403 Forbidden: HEAD /cgi-bin/users.asp
+ 404 File Not Found: HEAD /users.dbf
+ 403 Forbidden: HEAD /cgi-bin/users.dbf
+ 404 File Not Found: HEAD /users.ini
+ 403 Forbidden: HEAD /cgi-bin/users.ini
+ 404 File Not Found: HEAD /users.db
+ 403 Forbidden: HEAD /cgi-bin/users.db
+ 404 File Not Found: HEAD /users.cfg
+ 403 Forbidden: HEAD /cgi-bin/users.cfg
+ 404 File Not Found: HEAD /users.exe
+ 403 Forbidden: HEAD /cgi-bin/users.exe
+ 404 File Not Found: HEAD /users.htx
+ 403 Forbidden: HEAD /cgi-bin/users.htx
+ 404 File Not Found: HEAD /users.lst
+ 403 Forbidden: HEAD /cgi-bin/users.lst
+ 404 File Not Found: HEAD /users.cgi
+ 403 Forbidden: HEAD /cgi-bin/users.cgi
+ 404 File Not Found: HEAD /users.pl
+ 403 Forbidden: HEAD /cgi-bin/users.pl
+ 404 File Not Found: HEAD /users.php3
+ 403 Forbidden: HEAD /cgi-bin/users.php3
+ 404 File Not Found: HEAD /clients.htm
+ 403 Forbidden: HEAD /cgi-bin/clients.htm
+ 404 File Not Found: HEAD /clients.html
+ 403 Forbidden: HEAD /cgi-bin/clients.html
+ 404 File Not Found: HEAD /clients.dat
+ 403 Forbidden: HEAD /cgi-bin/clients.dat
+ 404 File Not Found: HEAD /clients.data
+ 403 Forbidden: HEAD /cgi-bin/clients.data
+ 404 File Not Found: HEAD /clients.txt
+ 403 Forbidden: HEAD /cgi-bin/clients.txt
+ 404 File Not Found: HEAD /clients.asp
+ 403 Forbidden: HEAD /cgi-bin/clients.asp
+ 404 File Not Found: HEAD /clients.dbf
+ 403 Forbidden: HEAD /cgi-bin/clients.dbf
+ 404 File Not Found: HEAD /clients.ini
+ 403 Forbidden: HEAD /cgi-bin/clients.ini
+ 404 File Not Found: HEAD /clients.db
+ 403 Forbidden: HEAD /cgi-bin/clients.db
+ 404 File Not Found: HEAD /clients.cfg
+ 403 Forbidden: HEAD /cgi-bin/clients.cfg
+ 404 File Not Found: HEAD /clients.exe
+ 403 Forbidden: HEAD /cgi-bin/clients.exe
+ 404 File Not Found: HEAD /clients.htx
+ 403 Forbidden: HEAD /cgi-bin/clients.htx
+ 404 File Not Found: HEAD /clients.lst
+ 403 Forbidden: HEAD /cgi-bin/clients.lst
+ 404 File Not Found: HEAD /clients.cgi
+ 403 Forbidden: HEAD /cgi-bin/clients.cgi
+ 404 File Not Found: HEAD /clients.pl
+ 403 Forbidden: HEAD /cgi-bin/clients.pl
+ 404 File Not Found: HEAD /clients.php3
+ 403 Forbidden: HEAD /cgi-bin/clients.php3
+ 404 File Not Found: HEAD /login.htm
```

```
+ 403 Forbidden: HEAD /cgi-bin/login.htm
+ 404 File Not Found: HEAD /login.html
+ 403 Forbidden: HEAD /cgi-bin/login.html
+ 404 File Not Found: HEAD /login.dat
+ 403 Forbidden: HEAD /cgi-bin/login.dat
+ 404 File Not Found: HEAD /login.data
+ 403 Forbidden: HEAD /cgi-bin/login.data
+ 404 File Not Found: HEAD /login.txt
+ 403 Forbidden: HEAD /cgi-bin/login.txt
+ 404 File Not Found: HEAD /login.asp
+ 403 Forbidden: HEAD /cgi-bin/login.asp
+ 404 File Not Found: HEAD /login.dbf
+ 403 Forbidden: HEAD /cgi-bin/login.dbf
+ 404 File Not Found: HEAD /login.ini
+ 403 Forbidden: HEAD /cgi-bin/login.ini
+ 404 File Not Found: HEAD /login.db
+ 403 Forbidden: HEAD /cgi-bin/login.db
+ 404 File Not Found: HEAD /login.cfg
+ 403 Forbidden: HEAD /cgi-bin/login.cfg
+ 404 File Not Found: HEAD /login.exe
+ 403 Forbidden: HEAD /cgi-bin/login.exe
+ 404 File Not Found: HEAD /login.htx
+ 403 Forbidden: HEAD /cgi-bin/login.htx
+ 404 File Not Found: HEAD /login.lst
+ 403 Forbidden: HEAD /cgi-bin/login.lst
+ 404 File Not Found: HEAD /login.cgi
+ 404 File Not Found: HEAD /login.pl
+ 404 File Not Found: HEAD /login.php3
+ 403 Forbidden: HEAD /cgi-bin/login.php3
+ 404 File Not Found: HEAD /admin.htm
+ 403 Forbidden: HEAD /cgi-bin/admin.htm
+ 404 File Not Found: HEAD /admin.html
+ 403 Forbidden: HEAD /cgi-bin/admin.html
+ 404 File Not Found: HEAD /admin.dat
+ 403 Forbidden: HEAD /cgi-bin/admin.dat
+ 404 File Not Found: HEAD /admin.data
+ 403 Forbidden: HEAD /cgi-bin/admin.data
+ 404 File Not Found: HEAD /admin.txt
+ 403 Forbidden: HEAD /cgi-bin/admin.txt
+ 404 File Not Found: HEAD /admin.asp
+ 403 Forbidden: HEAD /cgi-bin/admin.asp
+ 404 File Not Found: HEAD /admin.dbf
+ 403 Forbidden: HEAD /cgi-bin/admin.dbf
+ 404 File Not Found: HEAD /admin.ini
+ 403 Forbidden: HEAD /cgi-bin/admin.ini
+ 404 File Not Found: HEAD /admin.db
+ 403 Forbidden: HEAD /cgi-bin/admin.db
+ 404 File Not Found: HEAD /admin.cfg
+ 403 Forbidden: HEAD /cgi-bin/admin.cfg
+ 404 File Not Found: HEAD /admin.exe
+ 403 Forbidden: HEAD /cgi-bin/admin.exe
+ 404 File Not Found: HEAD /admin.htx
+ 403 Forbidden: HEAD /cgi-bin/admin.htx
+ 404 File Not Found: HEAD /admin.lst
+ 403 Forbidden: HEAD /cgi-bin/admin.lst
+ 404 File Not Found: HEAD /admin.cgi
+ 403 Forbidden: HEAD /cgi-bin/admin.cgi
```

```
+ 404 File Not Found: HEAD /admin.pl
+ 403 Forbidden: HEAD /cgi-bin/admin.pl
+ 404 File Not Found: HEAD /admin.php3
+ 404 File Not Found: HEAD /store.htm
+ 403 Forbidden: HEAD /cgi-bin/store.htm
+ 404 File Not Found: HEAD /store.html
+ 403 Forbidden: HEAD /cgi-bin/store.html
+ 404 File Not Found: HEAD /store.dat
+ 403 Forbidden: HEAD /cgi-bin/store.dat
+ 404 File Not Found: HEAD /store.data
+ 403 Forbidden: HEAD /cgi-bin/store.data
+ 404 File Not Found: HEAD /store.txt
+ 403 Forbidden: HEAD /cgi-bin/store.txt
+ 404 File Not Found: HEAD /store.asp
+ 403 Forbidden: HEAD /cgi-bin/store.asp
+ 404 File Not Found: HEAD /store.dbf
+ 403 Forbidden: HEAD /cgi-bin/store.dbf
+ 404 File Not Found: HEAD /store.ini
+ 403 Forbidden: HEAD /cgi-bin/store.ini
+ 404 File Not Found: HEAD /store.db
+ 403 Forbidden: HEAD /cgi-bin/store.db
+ 404 File Not Found: HEAD /store.cfg
+ 403 Forbidden: HEAD /cgi-bin/store.cfg
+ 404 File Not Found: HEAD /store.exe
+ 403 Forbidden: HEAD /cgi-bin/store.exe
+ 404 File Not Found: HEAD /store.htx
+ 403 Forbidden: HEAD /cgi-bin/store.htx
+ 404 File Not Found: HEAD /store.lst
+ 403 Forbidden: HEAD /cgi-bin/store.lst
+ 404 File Not Found: HEAD /store.cgi
+ 403 Forbidden: HEAD /cgi-bin/store.cgi
+ 404 File Not Found: HEAD /store.pl
+ 403 Forbidden: HEAD /cgi-bin/store.pl
+ 404 File Not Found: HEAD /store.php3
+ 403 Forbidden: HEAD /cgi-bin/store.php3
+ 404 File Not Found: HEAD /passwd
+ 403 Forbidden: HEAD /cgi-bin/passwd
+ 404 File Not Found: HEAD /passwd.txt
+ 403 Forbidden: HEAD /cgi-bin/passwd.txt
+ 404 File Not Found: HEAD /password
+ 403 Forbidden: HEAD /cgi-bin/password
+ 404 File Not Found: HEAD /status/
```

Engineer's Note: The remainder of the data are the script outputs from logging into the machine to perform a host-based assessment. Unless you're really curious, there's not much down there of particular note.

```
jpurvis@172.16.2.1's password:
Last login: Fri Nov 17 15:22:47 2000 from cerberus.XXX.XXX
Sun Microsystems Inc.   SunOS 5.6       Generic August 1997
Sun Microsystems Inc.   SunOS 5.6       Generic August 1997
kumo$
uname -a
kumo$ kumo$ uname -a
SunOS kumo 5.6 Generic sun4u sparc SUNW,Ultra-1
kumo$ su -
Password:
```

```
Sun Microsystems Inc.   SunOS 5.6       Generic August 1997
You have mail.
# /usr/sbin/arp -a
Net to Media Table
Device   IP Address               Mask      Flags   Phys Addr
------ -------------------- --------------- ----- ---------------
le0    kuko-dmz             255.255.255.255       08:00:20:9a:25:78
le0    172.16.2.47          255.255.255.255       00:10:a4:ed:86:f4
le0    kumo                 255.255.255.255 SP    08:00:20:7c:50:84
le0    BASE-ADDRESS.MCAST.NET 240.0.0.0       SM    01:00:5e:00:00:00

# /usr/sbin/auditconfig -chkconf
auditconfig: auditon(2) failed.
auditconfig: error = Invalid argument(22)

# /usr/sbin/auditconfig -getcond
auditconfig: auditon(2) failed.
auditconfig: error = Invalid argument(22)

# /usr/sbin/auditconfig -getpolicy
auditconfig: auditon(2) failed.
auditconfig: error = Invalid argument(22)

# df
/                  (/dev/dsk/c0t0d0s0 ):  108886 blocks    44142 files
/usr               (/dev/dsk/c0t0d0s6 ):  209144 blocks   252689 files
/proc              (/proc             ):       0 blocks      916 files
/dev/fd            (fd                ):       0 blocks        0 files
/var               (/dev/dsk/c0t0d0s1 ):  522956 blocks   146224 files
/opt               (/dev/dsk/c0t0d0s5 ):  666556 blocks   384353 files
/ftp02             (/dev/dsk/c0t1d0s6 ):  425766 blocks   489123 files
/ftp01             (/dev/dsk/c0t1d0s7 ):  122018 blocks   489071 files
/data              (/dev/dsk/c0t2d0s7 ):  600688 blocks   483972 files
/tmp               (swap              ):  541232 blocks     9598 files

# eeprom security-mode
security-mode=none

# env
HOME=/
HZ=
LOGNAME=root
PATH=/usr/local/bin:/bin:/usr/bin:/usr/sbin:/usr/ucb:/etc
SHELL=/sbin/sh
TERM=xterm-color
TZ=US/Pacific

# ifconfig -a
lo0: flags=849<UP,LOOPBACK,RUNNING,MULTICAST> mtu 8232
        inet 127.0.0.1 netmask ff000000
le0: flags=863<UP,BROADCAST,NOTRAILERS,RUNNING,MULTICAST> mtu 1500
        inet 172.16.2.1 netmask ffffff00 broadcast 172.16.2.255
        ether 8:0:20:7c:50:84

# last
jpurvis   pts/3        172.16.2.47      Fri Nov 17 15:43   still logged in
jpurvis   pts/3        cerberus.XXX.XXX Fri Nov 17 15:22 - 15:24  (00:01)
```

```
X41       ftp          cerberus.XXX.XXX Tue Nov 14 15:52 - 15:54  (00:02)
X41       ftp          cerberus.XXX.XXX Tue Nov 14 15:48 - 15:51  (00:03)
X41       ftp          thorn.brooks.X41 Tue Nov 14 15:46 - 15:48  (00:02)
X41       ftp          cerberus.XXX.XXX Tue Nov 14 15:31 - 15:32  (00:01)
jpurvis   pts/3        cerberus.XXX.XXX Tue Nov 14 15:19 - 16:47  (01:28)
internal  ftp          fw.XXXXXXXXXXX.c Tue Oct 24 15:22 - 15:24  (00:02)
internal  ftp          fw.XXXXXXXXXXX.c Tue Oct 24 15:21 - 15:22  (00:01)
internal  ftp          cerberus.XXX.XXX Tue Oct 24 13:00 - 13:01  (00:00)
internal  ftp          cerberus.XXX.XXX Tue Oct 24 12:36 - 12:57  (00:21)
internal  ftp          cerberus.XXX.XXX Tue Oct 24 12:35 - 12:35  (00:00)
jpurvis   pts/3        cerberus.XXX.XXX Tue Oct 24 12:25 - 14:47  (02:21)
root      console      :0               Tue Oct 24 12:07   still logged in
root      console                       Fri Aug 18 09:25 - 09:33  (00:08)
root      console      :0               Fri Aug 18 09:12 - 09:13  (00:00)
root      console      :0               Mon Jul 10 15:09 - 15:12  (00:02)
XXXXX40   pts/1        cerberus.XXX.XXX Sat May  6 15:59 - 16:01  (00:02)
XXXXX40   pts/1        cerberus.XXX.XXX Fri May  5 12:51 - 16:09  (03:18)
XXXXX40   pts/1        cerberus.XXX.XXX Fri May  5 12:48 - 12:50  (00:02)
XXXXX40   pts/1        cerberus.XXX.XXX Fri May  5 12:05 - 12:05  (00:00)
XXXXX40   pts/1        cerberus.XXX.XXX Fri May  5 10:51 - 11:12  (00:20)
XXXXX40   pts/1        cerberus.XXX.XXX Fri May  5 10:09 - 10:18  (00:09)
XXXXX40   pts/1        cerberus.XXX.XXX Fri May  5 10:07 - 10:09  (00:01)
XXXXX40   pts/1        cerberus.XXX.XXX Fri May  5 10:01 - 10:06  (00:04)
root      console                       Fri May  5 09:21 - 10:00  (00:38)
root      console      :0               Fri May  5 09:20 - 09:21  (00:00)
XXXXX40   pts/1        cerberus.XXX.XXX Fri Apr 28 15:46 - 15:58  (00:11)
reboot    system boot                   Tue Apr 25 21:44
root      console      :0               Tue Apr 25 16:54 - 16:57  (00:03)
XXXXX40   pts/1        cerberus.XXX.XXX Thu Apr 20 09:53 - 09:57  (00:03)
XXXXX40   pts/1        cerberus.XXX.XXX Mon Mar 27 15:14 - 15:39  (00:25)
XXXXX40   pts/1        cerberus.XXX.XXX Fri Mar 24 12:21 - 12:24  (00:03)
XXXXX40   pts/1        cerberus.XXX.XXX Thu Mar 23 14:21 - 16:45  (02:23)
XXXXX40   pts/2        cerberus.XXX.XXX Wed Mar 22 11:06 - 12:51  (01:45)
XXXXX40   pts/1        cerberus.XXX.XXX Wed Mar 22 10:46 - 12:51  (02:04)
XXXXX40   pts/1        cerberus.XXX.XXX Tue Mar 21 10:46 - 13:32  (02:46)
XXXXX40   pts/2        cerberus.XXX.XXX Mon Mar 20 12:36 - 14:06  (01:30)
XXXXX40   pts/1        cerberus.XXX.XXX Mon Mar 20 10:30 - 13:45  (03:14)
XXXXX40   pts/2        cerberus.XXX.XXX Fri Mar 10 11:32 - 11:49  (00:17)
XXXXX40   pts/2        cerberus.XXX.XXX Fri Mar 10 11:19 - 11:20  (00:00)
XXXXX40   pts/1        cerberus.XXX.XXX Fri Mar 10 11:05 - 12:50  (01:45)
XXXXX40   pts/2        cerberus.XXX.XXX Fri Mar 10 10:53 - 11:09  (00:16)
XXXXX40   pts/1        cerberus.XXX.XXX Fri Mar 10 10:51 - 11:04  (00:12)
XXXXX40   pts/1        cerberus.XXX.XXX Wed Mar  8 10:36 - 13:37  (03:01)
XXXXX40   pts/2        cerberus.XXX.XXX Tue Mar  7 14:13 - 14:27  (00:13)
XXXXX40   pts/1        cerberus.XXX.XXX Tue Mar  7 14:11 - 14:28  (00:16)
XXXXX40   pts/1        cerberus.XXX.XXX Tue Feb 22 14:27 - 14:29  (00:01)
reboot    system boot                   Sun Feb 20 16:51
reboot    system boot                   Sun Feb 20 16:16
XXXXX40   pts/4        cerberus.XXX.XXX Fri Feb 18 09:36 - 09:58  (00:21)
XXXXX40   pts/4        cerberus.XXX.XXX Wed Feb 16 14:28 - 15:08  (00:40)
XXXXX40   pts/4        kuko-dmz         Wed Feb 16 11:46 - 11:48  (00:01)
XXXXX40   pts/4        kuko-dmz         Wed Feb 16 11:39 - 11:43  (00:03)
XXXXX40   pts/4        cerberus.XXX.XXX Mon Jan 24 11:30 - 11:33  (00:02)
XXXXX40   pts/4        cerberus.XXX.XXX Mon Jan 24 11:25 - 11:30  (00:04)
XXXXXXX6  ftp          cerberus.XXX.XXX Sat Jan 23 15:35 - 15:36  (00:00)
XXXXXXX6  pts/1        cerberus.XXX.XXX Fri Jan 22 15:56 - 16:38  (00:41)
XXXXXXX6  ftp          cerberus.XXX.XXX Fri Jan 22 10:09 - 10:11  (00:02)
```

```
XXXXXXX6  pts/1        cerberus.XXX.XXX Fri Jan 22 08:24 - 08:32  (00:08)
XXXXX31   ftp          cerberus.XXX.XXX Thu Jan 21 13:54 - 14:05  (00:10)
XXXXXXX6  pts/1        cerberus.XXX.XXX Tue Jan 19 20:37 - 20:41  (00:03)
XXXXXXX6  pts/1        cerberus.XXX.XXX Tue Jan 19 20:37 - 20:41  (00:03)
XXXXX31   ftp          cerberus.XXX.XXX Tue Jan 19 14:35 - 14:51  (00:15)
XXXXX31   ftp          cerberus.XXX.XXX Tue Jan 19 11:10 - 11:13  (00:02)
testacct  pts/2        cerberus.XXX.XXX Tue Jan 19 00:46 - 00:47  (00:00)
testacct  pts/2        cerberus.XXX.XXX Tue Jan 19 00:45 - 00:46  (00:00)
testacct  pts/2        cerberus.XXX.XXX Tue Jan 19 00:41 - 00:42  (00:00)
testacct  pts/2        cerberus.XXX.XXX Tue Jan 19 00:41 - 00:41  (00:00)
testacct  pts/2        cerberus.XXX.XXX Tue Jan 19 00:37 - 00:38  (00:00)
testacct  pts/2        cerberus.XXX.XXX Tue Jan 19 00:37 - 00:37  (00:00)
testacct  pts/2        cerberus.XXX.XXX Tue Jan 19 00:36 - 00:37  (00:00)
testacct  pts/2        cerberus.XXX.XXX Tue Jan 19 00:33 - 00:33  (00:00)
testacct  pts/2        cerberus.XXX.XXX Tue Jan 19 00:30 - 00:32  (00:02)
testacct  pts/2        cerberus.XXX.XXX Tue Jan 19 00:26 - 00:30  (00:03)
XXXXXXX6  pts/1        cerberus.XXX.XXX Tue Jan 19 00:15 - 00:47  (00:31)
XXXXXXX6  ftp          cerberus.XXX.XXX Sun Jan 17 20:33 - 20:33  (00:00)
XXXXXXX6  ftp          192.168.84.164   Sun Jan 17 20:32 - 20:32  (00:00)
XXXXXXX6  pts/2        cerberus.XXX.XXX Sun Jan 17 12:32 - 12:34  (00:02)
testacct  pts/2        cerberus.XXX.XXX Sun Jan 17 12:30 - 12:30  (00:00)
testacct  pts/2        cerberus.XXX.XXX Sun Jan 17 11:35 - 11:36  (00:00)
XXXXXXX6  pts/1        cerberus.XXX.XXX Sun Jan 17 11:34 - 13:46  (02:11)
testacct  pts/2        cerberus.XXX.XXX Sun Jan 17 00:49 - 00:49  (00:00)
testacct  pts/2        cerberus.XXX.XXX Sun Jan 17 00:47 - 00:47  (00:00)
testacct  pts/2        cerberus.XXX.XXX Sun Jan 17 00:41 - 00:41  (00:00)
testacct  pts/2        cerberus.XXX.XXX Sun Jan 17 00:37 - 00:40  (00:03)
testacct  pts/2        cerberus.XXX.XXX Sun Jan 17 00:15 - 00:16  (00:01)
XXXXXXX6  pts/1        cerberus.XXX.XXX Sun Jan 17 00:14 - 00:53  (00:39)
XXXXXXX6  ftp          cerberus.XXX.XXX Fri Jan 15 11:42 - 11:42  (00:00)
XXXXXXX6  ftp          192.168.84.164   Fri Jan 15 11:42 - 11:42  (00:00)
XXXXXXX6  pts/2        cerberus.XXX.XXX Fri Jan 15 10:57 - 11:40  (00:42)
XXXXXXX6  pts/1        cerberus.XXX.XXX Fri Jan 15 10:57 - 11:40  (00:43)
XXXXXXX6  pts/1        cerberus.XXX.XXX Fri Jan 15 10:47 - 10:55  (00:08)
XXXXXXX6  pts/1        cerberus.XXX.XXX Fri Jan 15 10:24 - 10:47  (00:23)
XXXXXXX6  pts/1        cerberus.XXX.XXX Wed Jan 13 22:45 - 22:45  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Jan 12 12:28 - 12:29  (00:00)
XXXXXXX6  pts/1        cerberus.XXX.XXX Tue Jan 12 12:28 - 12:28  (00:00)
XXXXXXX6  ftp          192.168.84.164   Tue Jan 12 12:27 - 12:27  (00:00)
XXXXXXX6  ftp          192.168.84.164   Tue Jan 12 12:25 - 12:26  (00:00)
XXXXXXX6  pts/1        cerberus.XXX.XXX Tue Jan 12 11:44 - 11:52  (00:07)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Jan 12 11:44 - 11:45  (00:01)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Jan 12 11:37 - 11:38  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Jan 12 09:53 - 09:55  (00:02)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Jan 12 09:52 - 09:53  (00:00)
XXXXXXX6  pts/5        cerberus.XXX.XXX Tue Jan 12 09:49 - 12:27  (02:38)
XXXXXXX6  ftp          192.168.84.165   Mon Jan 11 16:03 - 16:03  (00:00)
XXXXXXX6  ftp          192.168.84.164   Mon Jan 11 16:02 - 16:02  (00:00)
XXXXXXX6  pts/7        cerberus.XXX.XXX Mon Jan 11 15:51 - 16:00  (00:09)
XXXXXXX6  ftp          192.168.84.165   Mon Jan 11 15:45 - 15:45  (00:00)
XXXXXXX6  ftp          192.168.84.165   Mon Jan 11 15:45 - 15:45  (00:00)
XXXXXXX6  ftp          192.168.84.164   Mon Jan 11 15:45 - 15:45  (00:00)
XXXXXXX6  ftp          192.168.84.195   Mon Jan 11 15:05 - 15:05  (00:00)
XXXXXXX6  ftp          192.168.84.164   Mon Jan 11 15:03 - 15:03  (00:00)
XXXXXXX6  pts/6        cerberus.XXX.XXX Mon Jan 11 14:14 - 16:26  (02:11)
XXXXXXX6  ftp          cerberus.XXX.XXX Mon Jan 11 14:06 - 14:06  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Mon Jan 11 12:06 - 12:23  (00:16)
```

```
XXXXXXX6  ftp          cerberus.XXX.XXX Mon Jan 11 12:04 - 12:06  (00:01)
XXXXXXX6  pts/5        cerberus.XXX.XXX Mon Jan 11 11:56 - 16:39  (04:42)
XXXXXXX6  ftp          cerberus.XXX.XXX Mon Jan 11 10:09 - 10:25  (00:15)
XXXXXXX6  pts/5        cerberus.XXX.XXX Mon Jan 11 09:55 - 10:01  (00:05)
XXXXXXX6  ftp          cerberus.XXX.XXX Mon Jan 11 09:48 - 10:08  (00:19)
XXXXXXX6  ftp          cerberus.XXX.XXX Mon Jan 11 09:12 - 09:13  (00:00)
XXXXXXX6  pts/5        cerberus.XXX.XXX Mon Jan 11 08:41 - 09:47  (01:05)
XXXXXX12  pts/5        cerberus.XXX.XXX Fri Jan  8 14:18 - 14:23  (00:05)
XXXXXXX6  ftp          192.168.84.164   Fri Jan  8 14:04 - 14:05  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Fri Jan  8 13:35 - 13:43  (00:07)
XXXXXXX6  pts/5        cerberus.XXX.XXX Fri Jan  8 13:10 - 13:35  (00:24)
XXXXXX12  pts/5        cerberus.XXX.XXX Fri Jan  8 12:27 - 12:32  (00:04)
XXXXXX12  pts/5        cerberus.XXX.XXX Fri Jan  8 12:27 - 12:27  (00:00)
XXXXXXX6  pts/5        cerberus.XXX.XXX Fri Jan  8 12:24 - 12:27  (00:02)
asdfXXX1  ftp          cerberus.XXX.XXX Thu Jan  7 09:58 - 10:07  (00:09)
XXXXXXX6  pts/5        cerberus.XXX.XXX Thu Jan  7 09:24 - 09:35  (00:11)
asdfXXX1  ftp          cerberus.XXX.XXX Wed Jan  6 16:41 - 16:44  (00:02)
asdfXXX1  ftp          cerberus.XXX.XXX Wed Jan  6 16:02 - 16:03  (00:01)
XXXXX31   ftp          cerberus.XXX.XXX Wed Jan  6 11:31 - 11:44  (00:13)
asdfXXX1  pts/5        cerberus.XXX.XXX Wed Jan  6 08:25 - 08:27  (00:02)
asdfXXX1  ftp          cerberus.XXX.XXX Tue Jan  5 14:06 - 14:11  (00:05)
XXXXX31   ftp          192.168.173.3    Tue Jan  5 08:28 - 08:54  (00:26)
XXXXX31   ftp          192.168.173.3    Tue Jan  5 08:18 - 08:27  (00:08)
XXXXXXX6  pts/5        cerberus.XXX.XXX Tue Jan  5 00:39 - 00:46  (00:07)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Jan  5 00:37 - 00:46  (00:08)
XXXXXXX6  pts/5        cerberus.XXX.XXX Mon Jan  4 22:06 - 22:10  (00:03)
XXXXXXX6  ftp          10k.singingbeagl Mon Jan  4 15:41 - 15:41  (00:00)
XXXXXXX6  ftp          10k.singingbeagl Mon Jan  4 15:40 - 15:40  (00:00)
XXXXXXX6  ftp          10k.singingbeagl Mon Jan  4 15:23 - 15:23  (00:00)
XXXXXXX6  ftp          kuki-dmz         Mon Jan  4 15:22 - 15:22  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Mon Jan  4 15:03 - 15:03  (00:00)
XXXXXXX6  pts/4        cerberus.XXX.XXX Mon Jan  4 14:02 - 16:41  (02:39)
XXXXXXX6  pts/5        cerberus.XXX.XXX Mon Jan  4 10:39 - 12:54  (02:14)
XXXXXXX6  pts/4        cerberus.XXX.XXX Mon Jan  4 10:19 - 12:53  (02:33)
XXXXXXX6  pts/4        cerberus.XXX.XXX Thu Dec 24 13:43 - 13:45  (00:01)
XXXXXXX6  ftp          192.168.84.164   Thu Dec 24 13:37 - 13:37  (00:00)
XXXXXXX6  ftp          192.168.84.164   Thu Dec 24 13:29 - 13:29  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Thu Dec 24 13:29 - 13:29  (00:00)
XXXXXXX6  ftp          192.168.84.164   Thu Dec 24 13:25 - 13:25  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Thu Dec 24 13:24 - 13:24  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Thu Dec 24 13:24 - 13:24  (00:00)
XXXXXXX6  ftp          192.168.84.164   Thu Dec 24 11:39 - 11:40  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Thu Dec 24 11:37 - 11:38  (00:00)
XXXXXXX6  ftp          192.168.84.196   Thu Dec 24 09:25 - 09:25  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Thu Dec 24 09:07 - 09:07  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Thu Dec 24 09:05 - 09:07  (00:01)
XXXXXXX6  pts/4        cerberus.XXX.XXX Wed Dec 23 09:58 - 11:07  (01:08)
asdfXXX1  ftp          cerberus.XXX.XXX Wed Dec 23 09:29 - 09:45  (00:16)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Dec 22 15:06 - 15:06  (00:00)
XXXXXXX6  ftp          kuki-dmz         Tue Dec 22 15:04 - 15:05  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Dec 22 14:55 - 14:55  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Dec 22 13:11 - 13:11  (00:00)
XXXXXXX6  ftp          kuki-dmz         Tue Dec 22 13:09 - 13:09  (00:00)
XXXXXXX6  pts/4        cerberus.XXX.XXX Tue Dec 22 12:28 - 12:30  (00:02)
asdfXXX1  pts/4        cerberus.XXX.XXX Mon Dec 21 08:00 - 08:00  (00:00)
XXXXXXX6  pts/4        cerberus.XXX.XXX Sat Dec 19 08:33 - 08:46  (00:13)
XXXXXXX5  pts/4        cerberus.XXX.XXX Fri Dec 18 14:05 - 14:12  (00:07)
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asdfXXX1  ftp          cerberus.XXX.XXX Fri Dec 18 13:00 - 13:21  (00:21)
asdfXXX1  ftp          cerberus.XXX.XXX Fri Dec 18 12:50 - 12:56  (00:05)
asdfXXX1  ftp          cerberus.XXX.XXX Fri Dec 18 12:42 - 12:48  (00:05)
asdfXXX1  pts/4        cerberus.XXX.XXX Fri Dec 18 12:41 - 13:38  (00:57)
asdfXXX1  pts/4        cerberus.XXX.XXX Fri Dec 18 07:50 - 08:09  (00:19)
asdfXXX1  pts/4        cerberus.XXX.XXX Fri Dec 18 07:16 - 07:18  (00:01)
asdfXXX1  ftp          cerberus.XXX.XXX Thu Dec 17 13:46 - 14:02  (00:15)
asdfXXX1  pts/4        cerberus.XXX.XXX Thu Dec 17 12:59 - 15:03  (02:03)
XXXXXXX6  pts/4        192.168.84.163   Thu Dec 17 11:07 - 11:08  (00:00)
XXXXX31   ftp          XXXXX31.XXX.XXX  Tue Dec 15 15:57 - 15:59  (00:02)
XXXXX31   ftp          cerberus.XXX.XXX Tue Dec 15 15:55 - 15:55  (00:00)
XXXXX31   ftp          XXXXX31.XXX.XXX  Tue Dec 15 15:46 - 15:55  (00:08)
XXXXX31   ftp          cerberus.XXX.XXX Tue Dec 15 15:29 - 15:37  (00:07)
XXXXXXX6  pts/4        cerberus.XXX.XXX Tue Dec 15 15:27 - 17:51  (02:24)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Dec 15 15:26 - 15:29  (00:02)
XXXXXXX4  pts/4        cerberus.XXX.XXX Mon Dec 14 16:35 - 17:00  (00:24)
XXXXXXX6  pts/4        cerberus.XXX.XXX Sun Dec 13 17:36 - 17:44  (00:07)
XXXXXXX4  pts/4        cerberus.XXX.XXX Sat Dec 12 12:33 - 13:35  (01:01)
XXXXXXX6  pts/4        cerberus.XXX.XXX Thu Dec 10 23:18 - 01:18  (02:00)
XXXXXXX6  pts/4        cerberus.XXX.XXX Thu Dec 10 17:05 - 17:06  (00:01)
XXXXXXX6  pts/5        cerberus.XXX.XXX Thu Dec 10 16:11 - 16:12  (00:01)
XXXXXXX4  pts/4        cerberus.XXX.XXX Thu Dec 10 14:21 - 17:02  (02:41)
XXXXXXX4  pts/4        cerberus.XXX.XXX Thu Dec 10 11:46 - 12:19  (00:32)
XXXXXXX5  pts/4        cerberus.XXX.XXX Wed Dec  9 13:11 - 13:21  (00:09)
XXXXXXX5  pts/4        cerberus.XXX.XXX Wed Dec  9 11:32 - 12:27  (00:54)
XXXXXXX6  pts/4        cerberus.XXX.XXX Wed Dec  9 09:47 - 09:48  (00:01)
XXXXXXX6  pts/4        cerberus.XXX.XXX Wed Dec  9 09:32 - 09:33  (00:01)
XXXXXXX5  pts/4        cerberus.XXX.XXX Wed Dec  9 07:56 - 08:21  (00:25)
root      ftp          10k.singingbeagl Wed Dec  9 00:23 - 00:23  (00:00)
root      ftp          10k.singingbeagl Wed Dec  9 00:10 - 00:10  (00:00)
root      ftp          10k.singingbeagl Wed Dec  9 00:10 - 00:10  (00:00)
root      ftp          10k.singingbeagl Wed Dec  9 00:02 - 00:03  (00:00)
root      ftp          10k.singingbeagl Wed Dec  9 00:00 - 00:01  (00:00)
root      ftp          10k.singingbeagl Tue Dec  8 23:56 - 23:57  (00:00)
root      ftp          10k.singingbeagl Tue Dec  8 23:53 - 23:53  (00:00)
root      ftp          cerberus.XXX.XXX Tue Dec  8 23:47 - 23:47  (00:00)
root      ftp          cerberus.XXX.XXX Tue Dec  8 23:43 - 23:44  (00:00)
XXXXXXX6  pts/4        cerberus.XXX.XXX Tue Dec  8 23:15 - 00:58  (01:42)
XXXXXXX5  pts/4        cerberus.XXX.XXX Tue Dec  8 21:04 - 21:17  (00:12)
XXXXXXX6  pts/4        cerberus.XXX.XXX Thu Dec  3 10:28 - 10:29  (00:00)
XXXXXXX6  ftp          192.168.84.195   Thu Dec  3 08:23 - 08:23  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Thu Dec  3 08:22 - 08:23  (00:00)
XXXXXXX6  ftp          192.168.84.195   Thu Dec  3 08:17 - 08:17  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Thu Dec  3 08:16 - 08:16  (00:00)
root      console      :0               Tue Dec  1 09:46 - 11:37 (42+01:50)
root      console      :0               Mon Nov 30 16:05 - 16:16  (00:11)
reboot    system boot                   Mon Nov 30 15:26
reboot    system boot                   Mon Nov 30 15:22
reboot    system boot                   Mon Nov 30 15:18
reboot    system boot                   Mon Nov 30 15:10
XXXXXXX5  pts/6        cerberus.XXX.XXX Mon Nov 30 13:29 - 13:29  (00:00)
XXXXXXX6  pts/6        cerberus.XXX.XXX Sat Nov 28 12:12 - 12:12  (00:00)
XXXXXXX6  ftp          172.16.1.100     Wed Nov 25 23:07 - 23:07  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Wed Nov 25 23:06 - 23:07  (00:00)
asdfXXX1  pts/6        cerberus.XXX.XXX Tue Nov 24 14:08 - 14:09  (00:00)
XXXXXXX6  ftp          172.16.1.253     Tue Nov 24 13:08 - 13:08  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Nov 24 10:50 - 10:50  (00:00)
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XXXXXXX6  ftp          kuki-dmz          Tue Nov 24 10:48 - 10:48  (00:00)
XXXXXXX6  pts/6        cerberus.XXX.XXX  Tue Nov 24 10:20 - 12:22  (02:01)
XXXXXXX6  pts/6        cerberus.XXX.XXX  Mon Nov 23 17:09 - 17:09  (00:00)
XXXXXXX6  pts/6        cerberus.XXX.XXX  Mon Nov 23 09:57 - 09:57  (00:00)
XXXXXXX6  pts/6        cerberus.XXX.XXX  Mon Nov 23 00:01 - 00:05  (00:03)
XXXXXXX6  pts/6        cerberus.XXX.XXX  Sun Nov 22 23:17 - 23:20  (00:02)
XXXXXXX6  pts/6        cerberus.XXX.XXX  Sat Nov 21 00:33 - 02:45  (02:12)
XXXXXXX6  pts/6        cerberus.XXX.XXX  Fri Nov 20 06:45 - 06:47  (00:01)
XXXXXXX6  pts/6        cerberus.XXX.XXX  Thu Nov 19 21:11 - 21:13  (00:01)
XXXXXXX6  pts/6        cerberus.XXX.XXX  Tue Nov 17 22:45 - 22:47  (00:01)
XXXXXXX6  pts/6        cerberus.XXX.XXX  Sat Nov 14 23:24 - 00:11  (00:47)
XXXXXXX6  pts/6        cerberus.XXX.XXX  Sat Nov 14 02:34 - 02:37  (00:02)
XXXXXXX6  pts/6        cerberus.XXX.XXX  Sat Nov 14 01:49 - 01:50  (00:00)
XXXXXXX6  pts/6        cerberus.XXX.XXX  Sat Nov 14 00:38 - 00:42  (00:04)
XXXXXXX6  pts/6        cerberus.XXX.XXX  Sat Nov 14 00:27 - 00:33  (00:06)
XXXXXXX6  ftp          cerberus.XXX.XXX  Fri Nov 13 09:29 - 09:43  (00:13)
XXXXXXX6  ftp          cerberus.XXX.XXX  Fri Nov 13 09:28 - 09:29  (00:01)
XXXXX31   ftp          192.168.170.227   Thu Nov 12 11:05 - 11:07  (00:01)
XXXXX31   ftp          192.168.170.227   Thu Nov 12 11:04 - 11:05  (00:00)
XXXXX31   ftp          192.168.170.227   Thu Nov 12 11:00 - 11:02  (00:02)
XXXXX31   ftp          192.168.170.227   Thu Nov 12 11:00 - 11:02  (00:02)
XXXXXXX6  pts/6        cerberus.XXX.XXX  Thu Nov 12 00:03 - 00:04  (00:00)
XXXXXXX6  pts/6        cerberus.XXX.XXX  Wed Nov 11 15:24 - 15:56  (00:31)
XXXXXXX6  ftp          seki              Wed Nov 11 14:59 - 15:00  (00:01)
XXXXXXX6  ftp          seki              Wed Nov 11 14:58 - 14:59  (00:00)
XXXXXXX6  pts/6        cerberus.XXX.XXX  Wed Nov 11 10:27 - 10:39  (00:12)
XXXXXXX4  pts/6        cerberus.XXX.XXX  Tue Nov 10 11:18 - 11:47  (00:28)
XXXXXXX5  pts/6        cerberus.XXX.XXX  Mon Nov  9 08:29 - 08:33  (00:04)
XXXXXXX6  pts/6        cerberus.XXX.XXX  Sat Nov  7 11:05 - 11:07  (00:02)
XXXXXXX6  pts/6        cerberus.XXX.XXX  Fri Nov  6 09:34 - 09:36  (00:01)
XXXXXXX6  ftp          kuki-dmz          Thu Nov  5 17:50 - 17:50  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX  Thu Nov  5 17:49 - 17:49  (00:00)
XXXXXXX6  pts/8        cerberus.XXX.XXX  Thu Nov  5 12:02 - 13:55  (01:52)
XXXXXXX5  pts/7        cerberus.XXX.XXX  Thu Nov  5 11:38 - 12:17  (00:38)
XXXXXXX5  pts/6        cerberus.XXX.XXX  Thu Nov  5 10:31 - 12:42  (02:11)
XXXXXXX6  pts/6        cerberus.XXX.XXX  Thu Nov  5 09:24 - 10:09  (00:45)
XXXXXXX6  pts/6        cerberus.XXX.XXX  Wed Nov  4 17:47 - 17:58  (00:11)
XXXXXXX6  pts/7        cerberus.XXX.XXX  Wed Nov  4 16:41 - 16:49  (00:08)
XXXXXXX5  pts/6        cerberus.XXX.XXX  Wed Nov  4 16:39 - 16:50  (00:11)
XXXXXXX5  pts/6        cerberus.XXX.XXX  Wed Nov  4 11:59 - 12:01  (00:01)
XXXXXXX6  pts/6        cerberus.XXX.XXX  Wed Nov  4 00:39 - 01:47  (01:07)
XXXXXXX6  ftp          kuki-dmz          Mon Nov  2 11:02 - 11:02  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX  Mon Nov  2 11:00 - 11:01  (00:00)
XXXXXXX6  pts/6        cerberus.XXX.XXX  Mon Nov  2 09:29 - 10:24  (00:55)
XXXXXXX6  pts/6        cerberus.XXX.XXX  Wed Oct 28 20:13 - 20:18  (00:04)
XXXXX31   pts/6        XXXXX31.XXX.XXX   Wed Oct 28 14:40 - 14:40  (00:00)
XXXXX31   pts/6        cerberus.XXX.XXX  Wed Oct 28 14:39 - 14:39  (00:00)
XXXXXXX6  pts/6        cerberus.XXX.XXX  Mon Oct 26 19:20 - 19:27  (00:06)
XXXXXXX6  pts/6        cerberus.XXX.XXX  Fri Oct 23 12:37 - 13:03  (00:25)
XXXXXXX4  pts/6        cerberus.XXX.XXX  Fri Oct 23 08:19 - 10:31  (02:11)
XXXXXXX6  pts/6        cerberus.XXX.XXX  Wed Oct 21 20:08 - 20:10  (00:01)
XXXXXXX6  pts/6        cerberus.XXX.XXX  Tue Oct 20 09:30 - 09:50  (00:19)
XXXXXXX6  pts/6        seki              Mon Oct 19 17:04 - 17:05  (00:00)
XXXXXXX6  pts/6        cerberus.XXX.XXX  Mon Oct 19 16:22 - 16:22  (00:00)
XXXXX31   ftp          gatekeeper.ce9.u  Mon Oct 19 14:05 - 14:32  (00:27)
XXXXX31   ftp          gatekeeper.ce9.u  Mon Oct 19 13:43 - 13:57  (00:13)
XXXXXXX4  pts/6        cerberus.XXX.XXX  Mon Oct 19 12:41 - 12:43  (00:01)
```

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XXXXX31   ftp          gatekeeper.ce9.u Mon Oct 19 11:43 - 12:04  (00:20)
XXXXXXX6  pts/6        cerberus.XXX.XXX Mon Oct 19 09:24 - 12:21  (02:57)
XXXXXXX6  pts/6        cerberus.XXX.XXX Sat Oct 17 00:39 - 00:42  (00:03)
XXXXXXX6  pts/6        cerberus.XXX.XXX Wed Oct 14 10:53 - 10:53  (00:00)
XXXXXXX4  pts/6        cerberus.XXX.XXX Tue Oct 13 12:32 - 14:41  (02:09)
XXXXX31   ftp          208.202.157.62   Tue Oct 13 09:59 - 10:18  (00:19)
XXXXXXX6  pts/6        cerberus.XXX.XXX Tue Oct 13 00:49 - 00:51  (00:02)
XXXXXXX6  pts/6        cerberus.XXX.XXX Mon Oct 12 22:19 - 22:19  (00:00)
XXXXXXX6  pts/6        cerberus.XXX.XXX Mon Oct 12 22:11 - 22:18  (00:06)
XXXXXXX6  pts/6        cerberus.XXX.XXX Mon Oct 12 21:57 - 22:10  (00:13)
XXXXXXX6  pts/6        cerberus.XXX.XXX Mon Oct 12 21:57 - 22:10  (00:13)
XXXXXXX6  pts/6        cerberus.XXX.XXX Sun Oct 11 03:10 - 03:27  (00:16)
XXXXX31   ftp          we-192-168-2-117 Thu Oct  8 19:15 - 19:21  (00:05)
XXXXX31   ftp          we-192-168-2-117 Wed Oct  7 18:25 - 18:26  (00:00)
XXXXX31   ftp          we-192-168-2-117 Wed Oct  7 12:21 - 12:24  (00:03)
XXXXXXX6  ftp          cerberus.XXX.XXX Wed Oct  7 11:37 - 11:37  (00:00)
XXXXXXX6  ftp          kuki-dmz         Wed Oct  7 11:36 - 11:36  (00:00)
XXXXX31   ftp          cerberus.XXX.XXX Tue Oct  6 14:34 - 14:36  (00:02)
asdfXXX1  ftp          cerberus.XXX.XXX Tue Oct  6 09:20 - 09:38  (00:18)
asdfXXX1  ftp          cerberus.XXX.XXX Tue Oct  6 09:15 - 09:20  (00:04)
asdfXXX1  ftp          cerberus.XXX.XXX Tue Oct  6 09:13 - 09:14  (00:01)
asdfXXX1  ftp          cerberus.XXX.XXX Tue Oct  6 09:10 - 09:12  (00:02)
asdfXXX1  ftp          cerberus.XXX.XXX Tue Oct  6 09:09 - 09:10  (00:01)
asdfXXX1  ftp          cerberus.XXX.XXX Tue Oct  6 09:03 - 09:08  (00:05)
asdfXXX1  ftp          cerberus.XXX.XXX Tue Oct  6 09:01 - 09:03  (00:01)
asdfXXX1  ftp          cerberus.XXX.XXX Tue Oct  6 07:51 - 08:06  (00:15)
asdfXXX1  pts/6        cerberus.XXX.XXX Tue Oct  6 07:32 - 09:38  (02:05)
XXXXXXX6  pts/7        cerberus.XXX.XXX Mon Oct  5 01:18 - 03:31  (02:12)
XXXXXXX6  ftp          cerberus.XXX.XXX Mon Oct  5 01:17 - 01:17  (00:00)
XXXXXXX6  pts/6        cerberus.XXX.XXX Mon Oct  5 01:15 - 03:32  (02:17)
XXXXX31   ftp          cerberus.XXX.XXX Sat Oct  3 13:03 - 13:48  (00:45)
XXXXXXX6  pts/6        cerberus.XXX.XXX Fri Oct  2 22:45 - 22:54  (00:09)
XXXXXXX6  pts/6        cerberus.XXX.XXX Thu Oct  1 23:33 - 23:48  (00:14)
XXXXXXX6  pts/6        cerberus.XXX.XXX Tue Sep 29 19:39 - 19:55  (00:16)
ftp       ftp          ns.texlab.XXX.XX Tue Sep 29 07:31 - 09:25  (01:54)
XXXXX31   ftp          192.168.148.2    Mon Sep 28 14:25 - 14:37  (00:12)
XXXXX31   ftp          192.168.148.2    Mon Sep 28 14:14 - 14:17  (00:02)
XXXXX31   ftp          192.168.148.2    Mon Sep 28 14:11 - 14:11  (00:00)
XXXXX31   ftp          192.168.37.68    Fri Sep 25 18:48 - 18:50  (00:01)
XXXXXXX6  pts/5        cerberus.XXX.XXX Fri Sep 25 00:47 - 01:35  (00:48)
XXXXXXX6  pts/6        cerberus.XXX.XXX Fri Sep 25 00:34 - 00:42  (00:07)
XXXXXXX6  ftp          cerberus.XXX.XXX Fri Sep 25 00:31 - 00:31  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Fri Sep 25 00:22 - 00:22  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Fri Sep 25 00:03 - 00:12  (00:08)
XXXXXXX6  ftp          cerberus.XXX.XXX Thu Sep 24 23:20 - 23:31  (00:10)
XXXXXXX6  pts/5        cerberus.XXX.XXX Thu Sep 24 23:09 - 00:42  (01:33)
XXXXXXX6  ftp          cerberus.XXX.XXX Thu Sep 24 17:13 - 17:13  (00:00)
XXXXXXX6  pts/6        cerberus.XXX.XXX Thu Sep 24 17:04 - 17:41  (00:36)
XXXXXXX6  pts/5        cerberus.XXX.XXX Thu Sep 24 16:39 - 17:47  (01:08)
XXXXX31   ftp          cerberus.XXX.XXX Thu Sep 24 10:18 - 10:20  (00:01)
ftp       ftp          ns.texlab.XXX.XX Wed Sep 23 20:56 - 21:07  (00:10)
ftp       ftp          ns.texlab.XXX.XX Wed Sep 23 20:53 - 20:56  (00:02)
ftp       ftp          ns.texlab.XXX.XX Wed Sep 23 20:52 - 20:53  (00:01)
ftp       ftp          ns.texlab.XXX.XX Wed Sep 23 20:35 - 20:37  (00:02)
ftp       ftp          ns.texlab.XXX.XX Wed Sep 23 19:28 - 19:31  (00:02)
XXXXXXX6  pts/6        cerberus.XXX.XXX Mon Sep 21 11:02 - 11:10  (00:07)
XXXXXXX4  pts/5        cerberus.XXX.XXX Mon Sep 21 10:48 - 13:13  (02:24)
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ftp       ftp          cerberus.XXX.XXX Thu Sep 17 09:07 - 09:07  (00:00)
XXXXXXX4  pts/5        cerberus.XXX.XXX Mon Sep 21 10:48 - 13:13  (02:24)
XXXXXXX6  pts/5        cerberus.XXX.XXX Sun Sep 20 01:40 - 02:10  (00:30)
XXXXX31   ftp          192.168.37.70    Fri Sep 18 15:35 - 15:35  (00:00)
XXXXX31   ftp          192.168.37.68    Fri Sep 18 13:27 - 13:27  (00:00)
XXXXX31   ftp          192.168.37.68    Fri Sep 18 12:46 - 12:49  (00:02)
XXXXX31   ftp          192.168.120.21   Fri Sep 18 11:16 - 11:21  (00:04)
XXXXX31   ftp          cerberus.XXX.XXX Fri Sep 18 08:09 - 09:48  (01:38)
XXXXX31   ftp          cerberus.XXX.XXX Fri Sep 18 01:57 - 02:06  (00:08)
XXXXXXX4  ftp          cerberus.XXX.XXX Fri Sep 18 01:55 - 01:57  (00:01)
XXXXX31   ftp          cerberus.XXX.XXX Fri Sep 18 00:26 - 01:55  (01:29)
XXXXX31   ftp          192.168.37.68    Thu Sep 17 11:34 - 11:35  (00:00)
XXXXX31   ftp          192.168.37.68    Thu Sep 17 11:13 - 11:29  (00:15)
XXXXX31   ftp          cerberus.XXX.XXX Thu Sep 17 09:39 - 09:42  (00:02)
XXXXX31   ftp          cerberus.XXX.XXX Thu Sep 17 09:37 - 09:37  (00:00)
XXXXX31   ftp          cerberus.XXX.XXX Thu Sep 17 09:36 - 09:36  (00:00)
XXXXX31   ftp          cerberus.XXX.XXX Thu Sep 17 09:28 - 09:29  (00:00)
XXXXXXX6  pts/5        cerberus.XXX.XXX Thu Sep 17 09:11 - 13:40  (04:28)
XXXXXXX6  ftp          cerberus.XXX.XXX Thu Sep 17 09:07 - 09:07  (00:00)
XXXXXXX4  ftp          cerberus.XXX.XXX Wed Sep 16 21:53 - 21:54  (00:01)
spear21   ftp          cerberus.XXX.XXX Wed Sep 16 21:50 - 21:52  (00:02)
XXXXXXX4  pts/5        cerberus.XXX.XXX Wed Sep 16 21:48 - 21:54  (00:06)
spear21   pts/5        cerberus.XXX.XXX Wed Sep 16 21:48 - 21:48  (00:00)
spear21   pts/5        cerberus.XXX.XXX Wed Sep 16 21:38 - 21:38  (00:00)
spear21   pts/5        cerberus.XXX.XXX Wed Sep 16 21:37 - 21:37  (00:00)
spear21   ftp          cerberus.XXX.XXX Wed Sep 16 10:43 - 10:44  (00:00)
spear21   ftp          cerberus.XXX.XXX Wed Sep 16 10:28 - 10:43  (00:15)
spear21   ftp          cerberus.XXX.XXX Wed Sep 16 10:27 - 10:28  (00:00)
spear21   ftp          cerberus.XXX.XXX Wed Sep 16 10:18 - 10:19  (00:00)
spear21   ftp          cerberus.XXX.XXX Wed Sep 16 10:15 - 10:17  (00:01)
spear21   ftp          cerberus.XXX.XXX Wed Sep 16 10:10 - 10:14  (00:03)
ftp       ftp          192.168.51.254   Tue Sep 15 12:50 - 13:07  (00:16)
XXXXXXX6  pts/5        cerberus.XXX.XXX Tue Sep 15 12:42 - 12:45  (00:02)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Sep 15 12:40 - 12:45  (00:05)
ftp       ftp          cerberus.XXX.XXX Tue Sep 15 11:41 - 11:41  (00:00)
ftp       ftp          cerberus.XXX.XXX Tue Sep 15 11:41 - 11:41  (00:00)
XXXXXXX6  ftp          kuko-dmz         Fri Sep 11 10:15 - 10:15  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Fri Sep 11 10:12 - 10:13  (00:00)
XXXXXXX6  pts/6        cerberus.XXX.XXX Thu Sep 10 09:57 - 09:57  (00:00)
spear21   ftp          cerberus.XXX.XXX Thu Sep 10 09:56 - 09:57  (00:00)
spear21   pts/5        cerberus.XXX.XXX Thu Sep 10 09:55 - 09:55  (00:00)
spear21   pts/5        cerberus.XXX.XXX Thu Sep 10 09:52 - 09:52  (00:00)
spear21   pts/5        cerberus.XXX.XXX Thu Sep 10 09:50 - 09:50  (00:00)
XXXXXXX4  pts/5        cerberus.XXX.XXX Wed Sep  9 11:22 - 11:31  (00:09)
XXXXXXX6  pts/3        cerberus.XXX.XXX Tue Sep  8 17:38 - 17:53  (00:15)
XXXXXXX6  pts/3        cerberus.XXX.XXX Tue Sep  8 17:37 - 17:37  (00:00)
root      console      :0               Tue Sep  8 16:44 - 13:31 (82+21:46)
asdfXXX1  pts/1        cerberus.XXX.XXX Tue Sep  8 06:56 - 06:56  (00:00)
XXXXXXX6  pts/1        cerberus.XXX.XXX Mon Sep  7 22:53 - 22:53  (00:00)
spear21   ftp          cerberus.XXX.XXX Thu Sep  3 13:34 - 13:35  (00:01)
spear21   pts/1        cerberus.XXX.XXX Thu Sep  3 13:33 - 13:33  (00:00)
spear21   pts/1        cerberus.XXX.XXX Thu Sep  3 13:32 - 13:32  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Thu Sep  3 10:02 - 10:02  (00:00)
XXXXXXX6  pts/1        cerberus.XXX.XXX Thu Sep  3 10:01 - 13:04  (03:03)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Sep  1 21:44 - 21:44  (00:00)
XXXXXXX6  pts/3        cerberus.XXX.XXX Tue Sep  1 21:24 - 22:09  (00:45)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Sep  1 21:24 - 21:24  (00:00)
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XXXXXXX6  pts/2        cerberus.XXX.XXX Tue Sep  1 21:19 - 22:09  (00:50)
XXXXXXX6  pts/1        cerberus.XXX.XXX Tue Sep  1 21:16 - 22:09  (00:53)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Sep  1 21:16 - 21:16  (00:00)
XXXXXX11  pts/1        cerberus.XXX.XXX Tue Sep  1 20:21 - 20:23  (00:02)
XXXXXX11  ftp          cerberus.XXX.XXX Tue Sep  1 20:12 - 20:24  (00:11)
XXXXXXX6  pts/1        cerberus.XXX.XXX Tue Sep  1 19:56 - 20:10  (00:14)
asdfXXX1  pts/1        cerberus.XXX.XXX Tue Sep  1 07:31 - 08:01  (00:29)
XXXXXX11  ftp          cerberus.XXX.XXX Mon Aug 31 17:00 - 17:01  (00:00)
XXXXXX11  ftp          cerberus.XXX.XXX Mon Aug 31 16:04 - 16:23  (00:18)
XXXXXX11  pts/2        cerberus.XXX.XXX Mon Aug 31 15:13 - 15:42  (00:28)
XXXXXXX6  pts/1        cerberus.XXX.XXX Mon Aug 31 14:38 - 16:54  (02:15)
XXXXXXX6  pts/1        cerberus.XXX.XXX Sun Aug 30 02:09 - 02:13  (00:03)
XXXXXXX6  pts/1        cerberus.XXX.XXX Sat Aug 29 08:52 - 09:21  (00:29)
spear21   ftp          192.168.235.252  Fri Aug 28 13:31 - 13:31  (00:00)
spear21   ftp          192.168.235.252  Fri Aug 28 11:19 - 11:25  (00:05)
spear21   ftp          cerberus.XXX.XXX Fri Aug 28 10:12 - 10:15  (00:03)
ftp       ftp          unogate.unocal.c Thu Aug 27 11:14 - 11:14  (00:00)
ftp       ftp          unogate.unocal.c Wed Aug 26 13:51 - 14:17  (00:26)
ftp       ftp          unogate.unocal.c Wed Aug 26 09:51 - 09:55  (00:03)
XXXXXXX6  ftp          cerberus.XXX.XXX Wed Aug 26 09:37 - 09:38  (00:01)
asdfXXX1  pts/1        cerberus.XXX.XXX Tue Aug 25 11:21 - 11:21  (00:00)
XXXXXXX6  pts/1        cerberus.XXX.XXX Mon Aug 24 00:41 - 00:44  (00:02)
spear21   ftp          seki             Fri Aug 21 10:00 - 10:08  (00:07)
XXXXXXX6  ftp          192.168.84.130   Thu Aug 20 14:34 - 14:36  (00:02)
XXXXXXX6  ftp          192.168.84.130   Thu Aug 20 14:32 - 14:32  (00:00)
XXXXXXX6  ftp          seki             Thu Aug 20 14:21 - 14:22  (00:00)
XXXXXXX6  pts/2        cerberus.XXX.XXX Thu Aug 20 14:20 - 16:50  (02:29)
XXXXXXX6  ftp          cerberus.XXX.XXX Thu Aug 20 14:04 - 14:05  (00:00)
XXXXXXX6  ftp          192.168.84.130   Thu Aug 20 13:06 - 13:06  (00:00)
XXXXXXX6  pts/1        cerberus.XXX.XXX Thu Aug 20 13:02 - 16:40  (03:37)
XXXXXXX6  ftp          192.168.84.130   Thu Aug 20 13:00 - 13:02  (00:01)
XXXXXXX6  ftp          192.168.84.130   Wed Aug 19 16:38 - 16:38  (00:00)
XXXXXXX6  ftp          192.168.84.130   Wed Aug 19 16:37 - 16:37  (00:00)
XXXXXXX6  pts/2        cerberus.XXX.XXX Wed Aug 19 16:11 - 17:35  (01:23)
XXXXXXX6  pts/1        cerberus.XXX.XXX Wed Aug 19 16:06 - 17:34  (01:28)
XXXXXXX6  ftp          seki             Tue Aug 18 16:35 - 16:35  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Aug 18 16:34 - 16:35  (00:00)
XXXXXXX6  ftp          kuko-dmz         Tue Aug 18 15:19 - 15:19  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Aug 18 15:18 - 15:18  (00:00)
XXXXXXX6  pts/1        cerberus.XXX.XXX Tue Aug 18 15:18 - 16:38  (01:20)
XXXXXXX6  ftp          192.168.84.130   Tue Aug 18 15:17 - 15:18  (00:00)
XXXXXXX6  ftp          192.168.84.130   Tue Aug 18 15:09 - 15:10  (00:00)
XXXXXXX6  pts/1        192.168.84.130   Tue Aug 18 15:04 - 15:12  (00:08)
XXXXXXX6  ftp          192.168.84.130   Tue Aug 18 15:03 - 15:07  (00:03)
ftp       ftp          192.168.84.130   Tue Aug 18 15:02 - 15:03  (00:01)
XXXXXXX6  pts/1        192.168.84.130   Tue Aug 18 11:48 - 11:49  (00:00)
XXXXXXX6  ftp          192.168.84.130   Tue Aug 18 11:19 - 11:20  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Aug 18 11:09 - 11:10  (00:00)
spear21   ftp          cerberus.XXX.XXX Tue Aug 18 10:15 - 10:22  (00:06)
spear21   ftp          cerberus.XXX.XXX Tue Aug 18 10:15 - 10:15  (00:00)
XXXXXXX6  pts/2        cerberus.XXX.XXX Tue Aug 18 10:12 - 10:22  (00:09)
XXXXXXX4  pts/1        cerberus.XXX.XXX Tue Aug 18 10:09 - 10:34  (00:25)
XXXXXXX4  ftp          cerberus.XXX.XXX Tue Aug 18 10:07 - 10:15  (00:07)
spear21   ftp          cerberus.XXX.XXX Tue Aug 18 10:06 - 10:07  (00:01)
spear21   ftp          cerberus.XXX.XXX Tue Aug 18 08:46 - 09:06  (00:20)
XXXXXXX4  pts/1        cerberus.XXX.XXX Tue Aug 18 08:45 - 09:12  (00:26)
XXXXXXX4  pts/1        cerberus.XXX.XXX Mon Aug 17 11:05 - 11:27  (00:21)
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XXXXXXX6  pts/1        192.168.51.254   Thu Aug 13 16:32 - 16:38  (00:06)
spear21   ftp          cerberus.XXX.XXX Thu Aug 13 11:01 - 11:02  (00:01)
spear21   ftp          cerberus.XXX.XXX Thu Aug 13 10:50 - 10:57  (00:07)
XXXXXXX6  pts/1        cerberus.XXX.XXX Wed Aug 12 00:22 - 00:57  (00:34)
XXXXXXX6  pts/1        cerberus.XXX.XXX Fri Aug  7 16:13 - 18:24  (02:11)
XXXXXXX6  ftp          cerberus.XXX.XXX Fri Aug  7 16:12 - 16:13  (00:00)
XXXXXXX6  pts/1        cerberus.XXX.XXX Fri Aug  7 15:57 - 15:58  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Fri Aug  7 15:57 - 15:57  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Fri Aug  7 15:54 - 15:56  (00:01)
root      console      :0               Fri Aug  7 13:05 - 14:42  (01:37)
spear21   ftp          192.168.51.76    Fri Aug  7 10:44 - 11:01  (00:16)
spear21   ftp          cerberus.XXX.XXX Fri Aug  7 07:49 - 08:34  (00:44)
XXXXXXX4  ftp          cerberus.XXX.XXX Fri Aug  7 07:48 - 07:49  (00:00)
spear21   ftp          192.168.119.171  Thu Aug  6 16:05 - 16:22  (00:17)
ftp       ftp          192.168.119.171  Thu Aug  6 15:39 - 15:40  (00:01)
spear21   ftp          192.168.51.76    Thu Aug  6 14:56 - 14:58  (00:02)
spear21   ftp          192.168.119.171  Thu Aug  6 14:50 - 14:56  (00:05)
spear21   ftp          192.168.119.171  Thu Aug  6 14:41 - 14:42  (00:01)
spear21   ftp          192.168.119.171  Thu Aug  6 14:33 - 14:40  (00:06)
ftp       ftp          192.168.119.171  Thu Aug  6 14:33 - 14:33  (00:00)
spear21   ftp          192.168.192.157  Thu Aug  6 10:47 - 10:50  (00:02)
spear21   ftp          192.168.192.157  Thu Aug  6 09:48 - 09:51  (00:03)
XXXXXX11  pts/0        cerberus.XXX.XXX Thu Aug  6 08:30 - 08:33  (00:03)
XXXXXXX6  pts/2        cerberus.XXX.XXX Wed Aug  5 22:24 - 22:58  (00:34)
XXXXXXX6  pts/0        cerberus.XXX.XXX Wed Aug  5 22:19 - 00:30  (02:10)
spear21   ftp          192.168.192.148  Wed Aug  5 11:45 - 11:46  (00:01)
spear21   ftp          192.168.192.148  Wed Aug  5 11:37 - 11:39  (00:01)
asdfXXX1  ftp          cerberus.XXX.XXX Wed Aug  5 07:13 - 07:18  (00:05)
spear21   ftp          192.168.192.145  Tue Aug  4 10:01 - 10:03  (00:02)
spear21   ftp          cerberus.XXX.XXX Mon Aug  3 15:05 - 15:07  (00:01)
spear21   ftp          cerberus.XXX.XXX Mon Aug  3 15:05 - 15:05  (00:00)
XXXXXXX4  pts/2        cerberus.XXX.XXX Thu Jul 30 15:19 - 17:28  (02:09)
XXXXXXX4  pts/0        cerberus.XXX.XXX Thu Jul 30 13:37 - 15:47  (02:10)
XXXXXXX4  pts/0        cerberus.XXX.XXX Thu Jul 30 10:45 - 13:16  (02:31)
XXXXXXX4  pts/0        cerberus.XXX.XXX Thu Jul 30 09:09 - 10:34  (01:24)
asdfXXX1  ftp          cerberus.XXX.XXX Thu Jul 30 08:04 - 08:12  (00:07)
asdfXXX1  ftp          cerberus.XXX.XXX Thu Jul 30 08:00 - 08:02  (00:02)
asdfXXX1  ftp          cerberus.XXX.XXX Thu Jul 30 07:56 - 07:59  (00:03)
asdfXXX1  ftp          cerberus.XXX.XXX Thu Jul 30 07:52 - 07:52  (00:00)
XXXXXXX4  ftp          cerberus.XXX.XXX Wed Jul 29 17:47 - 17:48  (00:01)
XXXXXXX4  ftp          cerberus.XXX.XXX Wed Jul 29 17:27 - 17:28  (00:01)
XXXXXXX4  pts/4        cerberus.XXX.XXX Wed Jul 29 16:31 - 18:31  (01:59)
XXXXXXX4  pts/3        cerberus.XXX.XXX Wed Jul 29 16:09 - 18:31  (02:21)
XXXXXXX4  pts/2        cerberus.XXX.XXX Wed Jul 29 14:38 - 17:29  (02:51)
XXXXXXX4  pts/0        cerberus.XXX.XXX Wed Jul 29 13:14 - 17:21  (04:07)
XXXXXXX4  pts/0        cerberus.XXX.XXX Wed Jul 29 12:49 - 12:59  (00:09)
XXXXXXX2  pts/0        cerberus.XXX.XXX Wed Jul 29 10:50 - 10:50  (00:00)
XXXXXXX4  ftp          cobalt.foobar.as Wed Jul 29 10:44 - 10:44  (00:00)
spear21   ftp          pna-169.kla-ten- Wed Jul 29 10:32 - 10:32  (00:00)
XXXXXXX4  pts/0        cerberus.XXX.XXX Tue Jul 28 18:15 - 18:32  (00:17)
XXXXXXX4  pts/0        cerberus.XXX.XXX Tue Jul 28 14:24 - 16:41  (02:17)
XXXXXXX6  ftp          pna-169.kla-ten- Tue Jul 28 11:13 - 11:20  (00:07)
XXXXXXX4  pts/2        cerberus.XXX.XXX Tue Jul 28 10:32 - 14:34  (04:01)
spear21   ftp          cerberus.XXX.XXX Tue Jul 28 09:12 - 09:20  (00:08)
ftp       ftp          cerberus.XXX.XXX Tue Jul 28 09:11 - 09:12  (00:00)
ftp       ftp          cerberus.XXX.XXX Tue Jul 28 09:11 - 09:11  (00:00)
ftp       ftp          cerberus.XXX.XXX Tue Jul 28 09:10 - 09:11  (00:00)
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XXXXXXX4  pts/0        cerberus.XXX.XXX Tue Jul 28 08:41 - 10:52  (02:10)
XXXXXXX6  ftp          cerberus.XXX.XXX Mon Jul 27 12:00 - 12:00  (00:00)
root      console      :0               Mon Jul 27 11:57 - 11:58  (00:00)
XXXXXXX6  pts/0        cerberus.XXX.XXX Mon Jul 27 11:51 - 14:11  (02:20)
reboot    system boot                   Mon Jul 27 11:49
root      console      :0               Mon Jul 27 11:07 - 11:48  (00:40)
XXXXXXX6  pts/2        cerberus.XXX.XXX Mon Jul 27 10:31 - down   (01:17)
asdfXXX1  pts/1        cerberus.XXX.XXX Mon Jul 27 10:13 - 11:06  (00:53)
reboot    system boot                   Sun Jul 26 13:24
XXXXXXX4  pts/5        cerberus.XXX.XXX Sat Jul 25 16:44 - 16:47  (00:03)
XXXXXXX4  pts/5        cerberus.XXX.XXX Fri Jul 24 16:45 - 17:03  (00:17)
XXXXXXX4  pts/6        cerberus.XXX.XXX Thu Jul 23 16:19 - 16:20  (00:00)
XXXXXXX4  ftp          gateway.bar.foob Thu Jul 23 16:03 - 16:04  (00:01)
spear21   ftp          cerberus.XXX.XXX Thu Jul 23 15:56 - 16:03  (00:07)
spear21   ftp          cerberus.XXX.XXX Thu Jul 23 15:49 - 15:55  (00:06)
XXXXXXX4  pts/5        cerberus.XXX.XXX Thu Jul 23 15:24 - 17:51  (02:26)
asdfXXX1  pts/5        cerberus.XXX.XXX Thu Jul 23 13:33 - 13:33  (00:00)
asdfXXX1  pts/5        cerberus.XXX.XXX Thu Jul 23 12:51 - 13:29  (00:37)
asdfXXX1  pts/5        cerberus.XXX.XXX Thu Jul 23 10:51 - 11:25  (00:34)
asdfXXX1  pts/5        cerberus.XXX.XXX Thu Jul 23 09:22 - 10:32  (01:10)
XXXXXXX6  pts/5        cerberus.XXX.XXX Tue Jul 21 15:06 - 16:29  (01:22)
spear21   ftp          foo0-249.bar-baz Tue Jul 21 09:27 - 10:07  (00:39)
spear21   ftp          foo0-249.bar-baz Mon Jul 20 14:09 - 14:14  (00:05)
spear21   ftp          cerberus.XXX.XXX Mon Jul 20 13:59 - 14:09  (00:10)
spear21   ftp          cerberus.XXX.XXX Mon Jul 20 10:59 - 11:01  (00:01)
spear21   ftp          cerberus.XXX.XXX Mon Jul 20 10:31 - 10:59  (00:27)
XXXXXXX5  pts/5        cerberus.XXX.XXX Mon Jul 20 10:02 - 10:14  (00:11)
XXXXXXX5  pts/5        cerberus.XXX.XXX Mon Jul 20 10:02 - 10:02  (00:00)
spear21   ftp          cerberus.XXX.XXX Mon Jul 20 09:28 - 09:30  (00:01)
spear21   ftp          cerberus.XXX.XXX Mon Jul 20 09:25 - 09:25  (00:00)
XXXXXXX5  pts/5        cerberus.XXX.XXX Mon Jul 20 09:15 - 09:37  (00:22)
XXXXXXX5  pts/5        cerberus.XXX.XXX Mon Jul 20 09:03 - 09:14  (00:11)
XXXXXXX4  pts/5        cerberus.XXX.XXX Fri Jul 17 13:13 - 14:01  (00:48)
ftp       ftp          foo0-119.bar-baz Fri Jul 17 11:02 - 11:05  (00:02)
XXXXXXX6  ftp          mailman.XXX.XXX  Fri Jul 17 10:48 - 11:02  (00:14)
ftp       ftp          mailman.XXX.XXX  Fri Jul 17 10:47 - 10:48  (00:00)
XXXXXXX4  pts/5        cerberus.XXX.XXX Fri Jul 17 06:50 - 06:55  (00:05)
XXXXXXX2  ftp          cerberus.XXX.XXX Thu Jul 16 21:10 - 21:33  (00:23)
XXXXXXX4  ftp          mailman.XXX.XXX  Thu Jul 16 17:10 - 17:13  (00:03)
XXXXXXX4  pts/5        cerberus.XXX.XXX Thu Jul 16 17:09 - 17:24  (00:15)
XXXXXXX6  pts/9        cerberus.XXX.XXX Thu Jul 16 15:57 - down  (9+21:27)
XXXXXXX4  pts/8        cerberus.XXX.XXX Thu Jul 16 15:56 - 17:24  (01:28)
XXXXXXX6  pts/7        cerberus.XXX.XXX Thu Jul 16 15:45 - 16:56  (01:11)
XXXXXXX6  pts/8        cerberus.XXX.XXX Thu Jul 16 15:25 - 15:35  (00:10)
XXXXXXX4  pts/6        cerberus.XXX.XXX Thu Jul 16 15:03 - 17:51  (02:47)
XXXXXXX4  ftp          cerberus.XXX.XXX Thu Jul 16 15:01 - 15:02  (00:01)
XXXXXXX4  pts/7        cerberus.XXX.XXX Thu Jul 16 13:30 - 15:41  (02:11)
XXXXXXX4  pts/6        cerberus.XXX.XXX Thu Jul 16 12:13 - 14:23  (02:10)
XXXXXXX4  pts/5        cerberus.XXX.XXX Thu Jul 16 11:25 - 17:02  (05:37)
XXXXXXX6  ftp          10k.singingbeagl Thu Jul 16 11:10 - 11:10  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Thu Jul 16 11:09 - 11:09  (00:00)
XXXXXXX6  pts/6        cerberus.XXX.XXX Thu Jul 16 10:25 - 11:19  (00:54)
XXXXXXX6  pts/5        cerberus.XXX.XXX Thu Jul 16 10:14 - 11:20  (01:05)
XXXXXXX2  ftp          cerberus.XXX.XXX Wed Jul 15 17:18 - 17:32  (00:13)
XXXXXXX4  pts/7        cerberus.XXX.XXX Wed Jul 15 17:16 - 17:18  (00:01)
XXXXXXX2  pts/6        cerberus.XXX.XXX Wed Jul 15 17:12 - 17:18  (00:06)
XXXXXXX2  ftp          cerberus.XXX.XXX Wed Jul 15 17:11 - 17:12  (00:00)
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XXXXXXX4  ftp          gateway.pub.foob Wed Jul 15 17:06 - 17:06  (00:00)
XXXXXXX2  pts/7        cerberus.XXX.XXX Wed Jul 15 16:56 - 17:08  (00:11)
XXXXXXX2  ftp          cerberus.XXX.XXX Wed Jul 15 16:50 - 16:54  (00:03)
XXXXXXX4  pts/6        cerberus.XXX.XXX Wed Jul 15 16:35 - 17:05  (00:29)
XXXXXXX4  pts/5        cerberus.XXX.XXX Wed Jul 15 14:30 - 17:18  (02:47)
XXXXXXX6  pts/5        cerberus.XXX.XXX Wed Jul 15 14:24 - 14:25  (00:00)
ftp       ftp          pix3-112.kla-ten Wed Jul 15 14:20 - 14:23  (00:03)
XXXXXXX6  pts/5        cerberus.XXX.XXX Wed Jul 15 14:19 - 14:19  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Wed Jul 15 14:17 - 14:18  (00:00)
ftp       ftp          pix3-112.kla-ten Wed Jul 15 11:29 - 13:18  (01:49)
XXXXXXX6  ftp          cerberus.XXX.XXX Wed Jul 15 11:27 - 11:27  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Wed Jul 15 11:20 - 11:25  (00:05)
ftp       ftp          cerberus.XXX.XXX Wed Jul 15 11:19 - 11:20  (00:00)
XXXXXXX6  pts/5        cerberus.XXX.XXX Wed Jul 15 11:10 - 11:28  (00:18)
spear21   ftp          cerberus.XXX.XXX Wed Jul 15 10:59 - 11:16  (00:17)
asdfXXX2  ftp          cerberus.XXX.XXX Wed Jul 15 06:55 - 06:59  (00:03)
XXXXXXX2  ftp          cerberus.XXX.XXX Tue Jul 14 19:07 - 19:07  (00:00)
XXXXXXX4  ftp          gateway.pub.gett Tue Jul 14 16:50 - 16:50  (00:00)
XXXXXXX4  pts/5        cerberus.XXX.XXX Tue Jul 14 16:22 - 17:10  (00:48)
XXXXXXX4  pts/5        cerberus.XXX.XXX Tue Jul 14 15:07 - 15:32  (00:25)
XXXXXXX4  pts/5        cerberus.XXX.XXX Tue Jul 14 13:33 - 14:40  (01:07)
spear21   ftp          cerberus.XXX.XXX Mon Jul 13 17:19 - 17:26  (00:07)
spear21   ftp          cerberus.XXX.XXX Mon Jul 13 17:12 - 17:13  (00:00)
spear21   ftp          cerberus.XXX.XXX Mon Jul 13 17:11 - 17:12  (00:00)
XXXXXXX6  pts/6        kuko-dmz         Mon Jul 13 16:52 - 18:52  (02:00)
XXXXXXX6  pts/5        kuko-dmz         Mon Jul 13 15:19 - 16:53  (01:33)
root      console      :0               Mon Jul 13 12:47 - down  (13+00:37)
spear21   ftp          cerberus.XXX.XXX Fri Jul 10 15:28 - 15:34  (00:06)
ftp       ftp          cerberus.XXX.XXX Fri Jul 10 15:27 - 15:28  (00:00)
jjXXXXX3  pts/3        cerberus.XXX.XXX Fri Jul 10 14:08 - 14:10  (00:02)
XXXXXXX4  ftp          209.60.58.129    Fri Jul 10 12:05 - 12:11  (00:05)
XXXXXXX4  pts/1        cerberus.XXX.XXX Fri Jul 10 11:17 - 14:16  (02:58)
jjXXXXX3  pts/1        cerberus.XXX.XXX Fri Jul 10 11:17 - 11:17  (00:00)
jjXXXXX3  pts/1        cerberus.XXX.XXX Fri Jul 10 11:15 - 11:15  (00:00)
jjXXXXX3  ftp          cerberus.XXX.XXX Fri Jul 10 11:15 - 11:15  (00:00)
jjXXXXX3  ftp          cerberus.XXX.XXX Fri Jul 10 11:10 - 11:10  (00:00)
jjXXXXX3  ftp          cerberus.XXX.XXX Fri Jul 10 10:32 - 10:33  (00:00)
jjXXXXX3  ftp          cerberus.XXX.XXX Fri Jul 10 10:02 - 10:02  (00:00)
jjXXXXX3  pts/1        cerberus.XXX.XXX Fri Jul 10 09:59 - 10:38  (00:39)
jjXXXXX3  pts/1        cerberus.XXX.XXX Fri Jul 10 08:14 - 08:45  (00:30)
spear21   ftp          cerberus.XXX.XXX Thu Jul  9 16:50 - 16:54  (00:03)
XXXXXXX4  ftp          cerberus.XXX.XXX Thu Jul  9 15:46 - 15:54  (00:08)
XXXXXXX4  ftp          cerberus.XXX.XXX Thu Jul  9 15:39 - 15:44  (00:05)
XXXXXXX4  pts/1        cerberus.XXX.XXX Thu Jul  9 15:37 - 15:46  (00:09)
XXXXXXX4  ftp          cerberus.XXX.XXX Thu Jul  9 15:24 - 15:28  (00:04)
XXXXXXX4  ftp          192.168.58.5      Thu Jul  9 15:19 - 15:23  (00:04)
jjXXXXX3  pts/3        cerberus.XXX.XXX Thu Jul  9 12:21 - 12:21  (00:00)
XXXXXXX4  ftp          192.168.58.5      Thu Jul  9 11:07 - 11:13  (00:05)
XXXXXXX4  pts/3        cerberus.XXX.XXX Thu Jul  9 11:07 - 11:17  (00:09)
jjXXXXX3  pts/1        cerberus.XXX.XXX Thu Jul  9 10:47 - 13:25  (02:38)
jjXXXXX3  console      :0               Thu Jul  9 10:35 - 10:39  (00:04)
jjXXXXX3  console      :0               Thu Jul  9 10:33 - 10:34  (00:01)
jjXXXXX3  pts/5        localhost        Thu Jul  9 10:31 - 10:31  (00:00)
root      console      :0               Thu Jul  9 10:24 - 10:32  (00:08)
spear21   ftp          cerberus.XXX.XXX Thu Jul  9 09:51 - 09:52  (00:01)
spear21   ftp          cerberus.XXX.XXX Thu Jul  9 09:50 - 09:50  (00:00)
spear21   ftp          cerberus.XXX.XXX Thu Jul  9 09:42 - 09:45  (00:02)
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XXXXXXX2  ftp          cerberus.XXX.XXX Wed Jul  8 14:35 - 14:42  (00:06)
XXXXXXX2  pts/1        cerberus.XXX.XXX Wed Jul  8 14:31 - 14:34  (00:03)
XXXXXXX4  ftp          192.168.58.5     Wed Jul  8 14:27 - 14:28  (00:01)
XXXXXXX4  pts/1        cerberus.XXX.XXX Wed Jul  8 14:25 - 14:30  (00:04)
XXXXXXX2  ftp          cerberus.XXX.XXX Wed Jul  8 14:24 - 14:25  (00:00)
XXXXXXX2  ftp          cerberus.XXX.XXX Wed Jul  8 14:01 - 14:04  (00:02)
XXXXXXX2  ftp          cerberus.XXX.XXX Wed Jul  8 13:34 - 13:38  (00:04)
XXXXXXX2  ftp          cerberus.XXX.XXX Wed Jul  8 13:27 - 13:31  (00:03)
XXXXXXX2  ftp          cerberus.XXX.XXX Wed Jul  8 13:21 - 13:24  (00:03)
XXXXXXX9  ftp          cerberus.XXX.XXX Wed Jul  8 13:19 - 13:20  (00:00)
XXXXXXX4  ftp          192.168.58.5     Wed Jul  8 13:11 - 13:19  (00:07)
XXXXXXX2  pts/3        cerberus.XXX.XXX Wed Jul  8 13:11 - 15:39  (02:28)
XXXXXXX2  ftp          cerberus.XXX.XXX Wed Jul  8 13:07 - 13:09  (00:01)
XXXXXXX4  pts/1        cerberus.XXX.XXX Wed Jul  8 12:57 - 14:17  (01:19)
XXXXXXX2  pts/1        cerberus.XXX.XXX Wed Jul  8 10:43 - 11:05  (00:22)
XXXXXXX2  ftp          cerberus.XXX.XXX Wed Jul  8 10:38 - 10:42  (00:04)
spear21   ftp          cerberus.XXX.XXX Mon Jul  6 10:36 - 10:36  (00:00)
XXXXXXX9  ftp          cerberus.XXX.XXX Thu Jul  2 14:38 - 14:52  (00:13)
XXXXXXX9  ftp          cerberus.XXX.XXX Thu Jul  2 14:33 - 14:38  (00:05)
XXXXXXX9  ftp          cerberus.XXX.XXX Thu Jul  2 14:05 - 14:33  (00:27)
XXXXXXX9  ftp          cerberus.XXX.XXX Thu Jul  2 13:57 - 13:59  (00:01)
XXXXXXX9  ftp          cerberus.XXX.XXX Thu Jul  2 13:38 - 13:53  (00:15)
XXXXXXX9  ftp          cerberus.XXX.XXX Thu Jul  2 13:31 - 13:33  (00:02)
XXXXXXX9  ftp          cerberus.XXX.XXX Thu Jul  2 13:30 - 13:31  (00:01)
XXXXXXX9  ftp          cerberus.XXX.XXX Thu Jul  2 13:26 - 13:29  (00:02)
XXXXXXX9  ftp          cerberus.XXX.XXX Thu Jul  2 13:22 - 13:26  (00:04)
XXXXXXX9  ftp          cerberus.XXX.XXX Thu Jul  2 13:18 - 13:20  (00:02)
XXXXXXX9  ftp          cerberus.XXX.XXX Thu Jul  2 13:12 - 13:16  (00:04)
XXXXXXX9  ftp          cerberus.XXX.XXX Thu Jul  2 12:52 - 13:07  (00:15)
XXXXXXX9  ftp          cerberus.XXX.XXX Thu Jul  2 12:45 - 12:47  (00:02)
XXXXXXX9  ftp          cerberus.XXX.XXX Thu Jul  2 12:41 - 12:43  (00:01)
XXXXXXX9  ftp          cerberus.XXX.XXX Thu Jul  2 12:24 - 12:34  (00:09)
XXXXXXX9  pts/4        cerberus.XXX.XXX Thu Jul  2 12:10 - 14:40  (02:30)
XXXXXXX2  pts/3        cerberus.XXX.XXX Thu Jul  2 11:58 - 14:00  (02:02)
spear21   pts/3        cerberus.XXX.XXX Thu Jul  2 11:57 - 11:57  (00:00)
XXXXXXX2  pts/3        cerberus.XXX.XXX Thu Jul  2 11:57 - 11:57  (00:00)
spear21   pts/4        cerberus.XXX.XXX Thu Jul  2 11:41 - 11:41  (00:00)
spear21   pts/4        cerberus.XXX.XXX Thu Jul  2 11:41 - 11:41  (00:00)
spear21   pts/3        cerberus.XXX.XXX Thu Jul  2 11:39 - 11:39  (00:00)
spear21   pts/3        cerberus.XXX.XXX Thu Jul  2 11:36 - 11:36  (00:00)
spear21   pts/3        cerberus.XXX.XXX Thu Jul  2 11:32 - 11:32  (00:00)
spear21   pts/3        cerberus.XXX.XXX Thu Jul  2 11:31 - 11:31  (00:00)
XXXXXXX4  pts/1        cerberus.XXX.XXX Thu Jul  2 11:23 - 14:18  (02:54)
asdfXXX3  ftp          cerberus.XXX.XXX Wed Jul  1 10:37 - 10:51  (00:14)
asdfXXX3  ftp          cerberus.XXX.XXX Wed Jul  1 10:26 - 10:30  (00:04)
XXXXXXX6  pts/1        cerberus.XXX.XXX Wed Jul  1 09:35 - 09:35  (00:00)
spear21   ftp          foo0-249.bar-baz Wed Jul  1 09:33 - 09:37  (00:03)
asdfXXX3  ftp          cerberus.XXX.XXX Wed Jul  1 09:31 - 09:33  (00:02)
XXXXXXX6  pts/1        cerberus.XXX.XXX Wed Jul  1 09:31 - 09:33  (00:01)
spear21   ftp          pix0-81.kla-tenc Tue Jun 30 15:17 - 15:20  (00:03)
XXXXXXX4  pts/1        cerberus.XXX.XXX Tue Jun 30 15:09 - 15:12  (00:02)
XXXXXXX4  ftp          cerberus.XXX.XXX Tue Jun 30 15:07 - 15:09  (00:01)
spear21   ftp          foo0-249.bar-baz Tue Jun 30 14:30 - 14:36  (00:05)
XXXXXXX4  pts/3        cerberus.XXX.XXX Tue Jun 30 14:28 - 14:28  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Jun 30 14:27 - 14:29  (00:01)
XXXXXXX6  pts/1        cerberus.XXX.XXX Tue Jun 30 14:26 - 14:29  (00:03)
spear21   ftp          foo0-249.bar-baz Tue Jun 30 14:20 - 14:27  (00:06)
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spear21   ftp          foo0-249.bar-baz Tue Jun 30 14:16 - 14:17  (00:00)
XXXXXXX6  pts/1        cerberus.XXX.XXX Tue Jun 30 14:14 - 14:16  (00:01)
spear21   ftp          foo0-249.bar-baz Tue Jun 30 14:11 - 14:12  (00:00)
spear21   ftp          foo0-249.bar-baz Tue Jun 30 14:08 - 14:09  (00:01)
XXXXXXX4  ftp          cerberus.XXX.XXX Tue Jun 30 14:08 - 14:08  (00:00)
XXXXXXX4  pts/1        cerberus.XXX.XXX Tue Jun 30 14:06 - 14:11  (00:05)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Jun 30 09:59 - 10:00  (00:00)
XXXXXXX6  ftp          seki             Tue Jun 30 09:59 - 09:59  (00:00)
XXXXXXX6  ftp          seki             Tue Jun 30 09:58 - 09:58  (00:00)
XXXXXXX6  pts/1        cerberus.XXX.XXX Tue Jun 30 09:57 - 09:59  (00:02)
XXXXXXX6  ftp          cerberus.XXX.XXX Mon Jun 29 15:54 - 15:54  (00:00)
XXXXXXX6  ftp          seki             Mon Jun 29 15:53 - 15:53  (00:00)
XXXXXXX6  pts/1        cerberus.XXX.XXX Mon Jun 29 15:50 - 15:54  (00:03)
ftp       ftp          192.168.220.249  Mon Jun 29 11:16 - 11:26  (00:10)
XXXXXXX4  pts/1        cerberus.XXX.XXX Sun Jun 28 16:15 - 16:22  (00:07)
XXXXXXX4  ftp          192.168.249.130  Sun Jun 28 16:14 - 16:20  (00:06)
XXXXXXX4  ftp          192.168.249.130  Sun Jun 28 16:09 - 16:12  (00:02)
XXXXXXX4  pts/1        mailman.XXX.XXX  Sun Jun 28 16:07 - 16:12  (00:04)
XXXXXXX4  ftp          mailman.XXX.XXX  Sun Jun 28 16:06 - 16:07  (00:00)
XXXXXXX4  pts/1        cerberus.XXX.XXX Sat Jun 27 12:01 - 12:24  (00:23)
spear21   ftp          cerberus.XXX.XXX Wed Jun 24 15:34 - 15:35  (00:00)
XXX33     ftp          pix3-130.foo-bar Wed Jun 24 11:16 - 11:17  (00:00)
XXXXXXX6  pts/1        cerberus.XXX.XXX Wed Jun 24 11:15 - 11:17  (00:01)
XXX33     ftp          cerberus.XXX.XXX Wed Jun 24 11:15 - 11:16  (00:01)
XXX33     ftp          seki             Wed Jun 24 11:10 - 11:10  (00:00)
XXX33     ftp          seki             Wed Jun 24 10:54 - 11:10  (00:15)
XXX33     ftp          seki             Wed Jun 24 10:24 - 10:25  (00:01)
XXX33     ftp          cerberus.XXX.XXX Wed Jun 24 10:06 - 10:06  (00:00)
XXX33     ftp          cerberus.XXX.XXX Wed Jun 24 10:06 - 10:06  (00:00)
XXX33     ftp          seki             Tue Jun 23 16:47 - 16:47  (00:00)
XXXXXXX6  pts/3        cerberus.XXX.XXX Tue Jun 23 14:38 - 15:21  (00:42)
ftp       ftp          foo0-249.bar-baz Tue Jun 23 14:28 - 14:32  (00:03)
XXX33     ftp          foo0-249.bar-baz Tue Jun 23 14:27 - 14:28  (00:00)
XXX33     ftp          seki             Tue Jun 23 14:24 - 14:27  (00:02)
XXX33     ftp          seki             Tue Jun 23 14:24 - 14:24  (00:00)
XXXXXXX6  pts/1        cerberus.XXX.XXX Tue Jun 23 14:08 - 15:20  (01:12)
XXX33     ftp          seki             Tue Jun 23 13:33 - 13:40  (00:07)
XXX33     ftp          seki             Tue Jun 23 13:24 - 13:26  (00:02)
XXXXXXX4  pts/3        mailman.XXX.XXX  Tue Jun 23 12:40 - 12:42  (00:01)
XXXXXXX4  ftp          192.168.112.2    Tue Jun 23 12:39 - 12:42  (00:02)
XXXXXXX4  ftp          192.168.112.2    Tue Jun 23 12:36 - 12:36  (00:00)
spear21   ftp          192.168.112.2    Tue Jun 23 11:06 - 11:19  (00:12)
XXXXXXX4  pts/3        mailman.XXX.XXX  Tue Jun 23 11:00 - 11:19  (00:19)
XXXXXXX4  pts/1        cerberus.XXX.XXX Tue Jun 23 10:51 - 13:14  (02:22)
XXX33     ftp          seki             Mon Jun 22 17:56 - 17:58  (00:02)
XXX33     ftp          pix1-112.foo-bar Mon Jun 22 15:35 - 15:38  (00:03)
XXX33     ftp          pix1-112.foo-bar Mon Jun 22 15:34 - 15:35  (00:00)
XXX33     ftp          pix1-112.foo-bar Mon Jun 22 15:34 - 15:34  (00:00)
XXX33     ftp          foo0-249.bar-baz Mon Jun 22 15:31 - 15:34  (00:03)
XXX33     ftp          seki             Mon Jun 22 15:14 - 15:15  (00:00)
XXX33     ftp          cerberus.XXX.XXX Mon Jun 22 15:12 - 15:14  (00:01)
XXXXXXX6  pts/1        cerberus.XXX.XXX Mon Jun 22 14:57 - 15:27  (00:29)
XXX33     ftp          seki             Mon Jun 22 14:42 - 14:43  (00:01)
spear21   ftp          seki             Mon Jun 22 14:42 - 14:42  (00:00)
XXX33     ftp          seki             Mon Jun 22 14:37 - 14:38  (00:01)
spear21   ftp          seki             Mon Jun 22 14:25 - 14:26  (00:00)
XXX33     ftp          cerberus.XXX.XXX Mon Jun 22 13:43 - 14:25  (00:42)
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spear21   ftp          cerberus.XXX.XXX Mon Jun 22 13:42 - 13:42  (00:00)
XXX33     ftp          seki             Mon Jun 22 13:26 - 13:27  (00:00)
spear21   ftp          seki             Mon Jun 22 13:25 - 13:26  (00:00)
XXX33     ftp          seki             Mon Jun 22 13:24 - 13:25  (00:00)
XXXXXXX6  pts/4        cerberus.XXX.XXX Mon Jun 22 12:22 - 13:38  (01:16)
XXXXXXX6  ftp          cerberus.XXX.XXX Mon Jun 22 12:14 - 12:20  (00:05)
XXXXXXX6  pts/3        cerberus.XXX.XXX Mon Jun 22 12:13 - 13:38  (01:25)
XXXXXXX6  pts/1        cerberus.XXX.XXX Mon Jun 22 11:43 - 13:53  (02:10)
ftp       ftp          pix2-201.foo-bar Fri Jun 19 14:38 - 14:39  (00:00)
ftp       ftp          cerberus.XXX.XXX Fri Jun 19 14:37 - 14:38  (00:01)
ftp       ftp          cerberus.XXX.XXX Fri Jun 19 14:30 - 14:30  (00:00)
XXXXXXX6  pts/1        cerberus.XXX.XXX Fri Jun 19 14:29 - 15:12  (00:42)
ftp       ftp          pix1-46.foo-bar. Fri Jun 19 14:28 - 14:30  (00:02)
ftp       ftp          pix1-218.foo-bar Wed Jun 17 17:48 - 17:48  (00:00)
XXX33     ftp          192.168.115.11   Wed Jun 17 11:11 - 11:42  (00:31)
XXX33     ftp          cerberus.XXX.XXX Wed Jun 17 10:22 - 10:47  (00:24)
XXX33     ftp          192.168.115.11   Wed Jun 17 09:03 - 09:33  (00:30)
XXXXXXX6  pts/1        cerberus.XXX.XXX Tue Jun 16 18:52 - 18:52  (00:00)
ftp       ftp          pix3-67.foo-barc Tue Jun 16 18:42 - 18:48  (00:06)
XXXXXXX6  pts/1        cerberus.XXX.XXX Tue Jun 16 18:40 - 18:51  (00:11)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Jun 16 18:39 - 18:40  (00:00)
spear21   ftp          cerberus.XXX.XXX Tue Jun 16 18:39 - 18:39  (00:00)
spear21   ftp          pix3-67.foo-barc Tue Jun 16 10:38 - 10:41  (00:02)
XXXXXXX6  pts/1        mailman.XXX.XXX  Tue Jun 16 10:35 - 10:37  (00:02)
spear21   ftp          seki             Tue Jun 16 10:33 - 10:36  (00:02)
XXX33     ftp          seki             Tue Jun 16 10:23 - 10:23  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Jun 16 09:24 - 09:25  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Mon Jun 15 16:55 - 16:55  (00:00)
asdfXXX1  ftp          cerberus.XXX.XXX Mon Jun 15 14:52 - 15:08  (00:15)
XXX33     ftp          cerberus.XXX.XXX Mon Jun 15 10:35 - 10:35  (00:00)
XXXXXXX6  pts/1        cerberus.XXX.XXX Mon Jun 15 10:34 - 12:44  (02:10)
XXX33     ftp          192.168.115.11   Mon Jun 15 08:59 - 09:05  (00:06)
XXXXXXX6  pts/3        cerberus.XXX.XXX Thu Jun 11 01:39 - 01:49  (00:09)
XXXXXXX6  pts/3        cerberus.XXX.XXX Thu Jun 11 01:38 - 01:39  (00:01)
XXXXXXX6  ftp          seki             Thu Jun 11 00:46 - 00:46  (00:00)
XXXXXXX6  ftp          seki             Thu Jun 11 00:45 - 00:45  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Thu Jun 11 00:43 - 00:44  (00:00)
XXXXXXX6  pts/4        cerberus.XXX.XXX Thu Jun 11 00:37 - 01:49  (01:11)
XXXXXXX6  pts/3        cerberus.XXX.XXX Thu Jun 11 00:37 - 01:37  (01:00)
XXXXXXX6  pts/1        cerberus.XXX.XXX Thu Jun 11 00:18 - 02:38  (02:20)
XXXXXXX6  pts/1        cerberus.XXX.XXX Wed Jun 10 23:41 - 23:45  (00:03)
XXXXXXX6  pts/1        cerberus.XXX.XXX Wed Jun 10 23:38 - 23:41  (00:03)
XXXXXXX4  ftp          cerberus.XXX.XXX Wed Jun 10 16:18 - 16:34  (00:15)
XXXXXXX4  pts/1        cerberus.XXX.XXX Wed Jun 10 16:10 - 16:35  (00:24)
XXXXXXX4  ftp          cerberus.XXX.XXX Wed Jun 10 16:10 - 16:16  (00:05)
XXXXXXX6  pts/1        mailman.XXX.XXX  Wed Jun 10 15:21 - 15:23  (00:01)
XXX33     ftp          seki             Wed Jun 10 15:19 - 15:20  (00:01)
XXXXXXX6  pts/1        mailman.XXX.XXX  Wed Jun 10 13:44 - 13:46  (00:02)
XXX33     ftp          yadayada1.nashua Wed Jun 10 08:11 - 08:13  (00:02)
XXX33     ftp          foobar.bazquux.a Wed Jun 10 07:40 - 07:42  (00:01)
XXX33     ftp          cerberus.XXX.XXX Tue Jun  9 17:46 - 17:46  (00:00)
XXX33     ftp          seki             Tue Jun  9 17:43 - 17:43  (00:00)
XXX33     ftp          seki             Tue Jun  9 15:56 - 15:56  (00:00)
XXX33     ftp          seki             Tue Jun  9 15:53 - 15:54  (00:00)
asdfXXX1  ftp          cerberus.XXX.XXX Tue Jun  9 07:45 - 07:48  (00:02)
XXX33     ftp          seki             Mon Jun  8 18:59 - 18:59  (00:00)
XXX33     ftp          seki             Mon Jun  8 18:38 - 18:38  (00:00)
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XXX33     ftp          seki             Mon Jun  8 18:12 - 18:13  (00:00)
XXX33     ftp          seki             Mon Jun  8 18:11 - 18:12  (00:00)
XXX33     ftp          seki             Mon Jun  8 18:10 - 18:10  (00:00)
XXX33     ftp          seki             Mon Jun  8 18:09 - 18:10  (00:00)
XXXXXXX6  pts/1        kuko-dmz         Mon Jun  8 17:21 - 17:22  (00:00)
XXXXXXX6  pts/1        kuko-dmz         Mon Jun  8 17:07 - 17:09  (00:01)
XXXXXXX6  pts/1        kuko-dmz         Mon Jun  8 16:56 - 16:57  (00:00)
XXX33     ftp          dargghasd.nashua Mon Jun  8 15:47 - 16:02  (00:15)
XXX33     ftp          seki             Mon Jun  8 15:44 - 15:45  (00:00)
XXX33     ftp          seki             Mon Jun  8 14:45 - 14:46  (00:00)
XXX33     ftp          seki             Mon Jun  8 14:38 - 14:38  (00:00)
XXXXXXX6  ftp          seki             Mon Jun  8 14:02 - 14:03  (00:00)
XXX33     ftp          seki             Mon Jun  8 13:36 - 13:37  (00:00)
XXX33     ftp          dargghasd.nashua Mon Jun  8 13:35 - 13:36  (00:01)
XXX33     ftp          seki             Mon Jun  8 13:04 - 13:04  (00:00)
XXX33     ftp          seki             Mon Jun  8 12:54 - 12:55  (00:00)
XXX33     ftp          dargghasd.nashua Mon Jun  8 12:39 - 12:40  (00:00)
XXX33     ftp          seki             Mon Jun  8 10:57 - 10:58  (00:00)
XXX33     ftp          dargghasd.nashua Mon Jun  8 10:57 - 10:57  (00:00)
XXX33     ftp          mailman.XXX.XXX  Mon Jun  8 10:51 - 10:51  (00:00)
XXXXXXX6  pts/1        mailman.XXX.XXX  Mon Jun  8 10:47 - 10:51  (00:03)
spear21   ftp          localhost        Fri Jun  5 19:39 - 19:39  (00:00)
spear21   ftp          localhost        Fri Jun  5 19:38 - 19:39  (00:00)
spear21   ftp          localhost        Fri Jun  5 19:36 - 19:37  (00:00)
XXXXXXX6  pts/1        mailman.XXX.XXX  Fri Jun  5 19:19 - 19:40  (00:21)
spear21   ftp          seki             Fri Jun  5 18:11 - 18:11  (00:00)
XXXXXXX6  ftp          seki             Fri Jun  5 17:29 - 17:32  (00:02)
dfXX12    ftp          meihost.goaway.y Fri Jun  5 10:26 - 10:32  (00:05)
dfXX12    ftp          cerberus.XXX.XXX Fri Jun  5 09:42 - 09:54  (00:11)
XXXXXXX4  pts/1        cerberus.XXX.XXX Fri Jun  5 09:35 - 09:54  (00:19)
dfXX12    ftp          cerberus.XXX.XXX Fri Jun  5 09:33 - 09:34  (00:00)
asdfXXX1  ftp          cerberus.XXX.XXX Fri Jun  5 08:04 - 08:05  (00:00)
XXXXXXX6  pts/1        cerberus.XXX.XXX Fri Jun  5 01:30 - 02:34  (01:04)
spear21   ftp          cerberus.XXX.XXX Thu Jun  4 15:01 - 15:02  (00:00)
dfXX12    ftp          cerberus.XXX.XXX Thu Jun  4 14:57 - 14:57  (00:00)
XXXXXXX6  pts/3        cerberus.XXX.XXX Thu Jun  4 14:56 - 15:02  (00:06)
XXXXXXX6  pts/1        cerberus.XXX.XXX Thu Jun  4 14:49 - 14:57  (00:07)
fdXXXXX4  ftp          cerberus.XXX.XXX Thu Jun  4 14:43 - 14:44  (00:00)
XXXXXXX6  pts/4        cerberus.XXX.XXX Thu Jun  4 14:40 - 14:54  (00:13)
XXXXXXX6  pts/4        cerberus.XXX.XXX Thu Jun  4 14:23 - 14:40  (00:16)
XXXXXXX6  pts/1        cerberus.XXX.XXX Thu Jun  4 14:19 - 14:41  (00:21)
spear21   ftp          cerberus.XXX.XXX Thu Jun  4 11:46 - 11:51  (00:04)
XXXXXXX6  pts/1        cerberus.XXX.XXX Thu Jun  4 00:23 - 00:43  (00:19)
XXXXXXX6  pts/1        cerberus.XXX.XXX Thu Jun  4 00:12 - 00:23  (00:11)
XXXXXXX6  pts/3        cerberus.XXX.XXX Tue Jun  2 23:11 - 23:14  (00:02)
XXXXXXX6  pts/1        cerberus.XXX.XXX Tue Jun  2 23:09 - 23:12  (00:02)
spear21   ftp          cerberus.XXX.XXX Mon Jun  1 16:33 - 16:33  (00:00)
XXXXXXX6  pts/1        cerberus.XXX.XXX Mon Jun  1 08:55 - 09:41  (00:46)
XXXXXXX4  ftp          seki             Fri May 29 10:08 - 10:11  (00:02)
XXXXXXX4  ftp          seki             Fri May 29 10:08 - 10:08  (00:00)
XXXXXXX4  ftp          seki             Fri May 29 10:07 - 10:08  (00:00)
XXXXXXX4  ftp          seki             Fri May 29 10:05 - 10:05  (00:00)
XXXXXXX6  ftp          seki             Tue May 26 11:34 - 11:34  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue May 26 11:33 - 11:34  (00:00)
XXXXXXX6  pts/4        cerberus.XXX.XXX Tue May 26 10:07 - 13:59  (03:52)
XXXXXXX6  pts/3        cerberus.XXX.XXX Tue May 26 10:06 - 14:02  (03:55)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue May 26 09:27 - 09:27  (00:00)
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XXXXXXX6  pts/1        cerberus.XXX.XXX Tue May 26 09:25 - 13:19  (03:53)
spear21   ftp          cerberus.XXX.XXX Mon May 25 10:53 - 10:56  (00:02)
spear21   pts/1        cerberus.XXX.XXX Mon May 25 10:53 - 10:53  (00:00)
XXXXXXX4  pts/1        cerberus.XXX.XXX Mon May 25 10:49 - 10:53  (00:04)
XXXXXXX6  ftp          seki             Fri May 22 09:17 - 09:18  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Fri May 22 09:04 - 09:07  (00:02)
XXXXXXX6  ftp          cerberus.XXX.XXX Thu May 21 19:04 - 19:04  (00:00)
XXXXXXX6  pts/1        cerberus.XXX.XXX Thu May 21 19:03 - 19:04  (00:00)
XXXXXXX6  pts/1        cerberus.XXX.XXX Thu May 21 18:50 - 19:03  (00:13)
XXXXXXX6  pts/1        cerberus.XXX.XXX Tue May 19 23:41 - 00:04  (00:22)
XXXXXXX6  ftp          pix2-22.foo-barc Tue May 19 08:59 - 09:01  (00:02)
XXXXXXX6  ftp          cerberus.XXX.XXX Mon May 18 23:17 - 23:20  (00:02)
XXXXXXX6  pts/1        cerberus.XXX.XXX Mon May 18 23:16 - 23:18  (00:01)
XXXXXXX6  ftp          cerberus.XXX.XXX Fri May 15 17:55 - 18:00  (00:05)
spear21   ftp          seki             Fri May 15 16:41 - 16:42  (00:00)
spear21   ftp          seki             Fri May 15 16:38 - 16:39  (00:01)
spear21   ftp          seki             Fri May 15 16:36 - 16:37  (00:01)
XXXXXXX6  pts/1        cerberus.XXX.XXX Fri May 15 15:16 - 15:16  (00:00)
XXXXXXX6  pts/1        cerberus.XXX.XXX Fri May 15 13:57 - 14:44  (00:47)
XXXXXXX6  pts/3        cerberus.XXX.XXX Fri May 15 03:16 - 04:06  (00:49)
XXXXXXX6  pts/2        cerberus.XXX.XXX Fri May 15 01:16 - 03:16  (02:00)
XXXXXXX6  pts/1        cerberus.XXX.XXX Thu May 14 23:52 - 03:25  (03:32)
XXXXXXX6  ftp          cerberus.XXX.XXX Thu May 14 23:52 - 23:52  (00:00)
asdfXXX1  ftp          cerberus.XXX.XXX Thu May 14 16:06 - 16:22  (00:15)
asdfXXX1  ftp          cerberus.XXX.XXX Thu May 14 15:23 - 15:43  (00:20)
XXXXXXX6  pts/1        cerberus.XXX.XXX Thu May 14 15:03 - 17:29  (02:26)
XXXXXXX6  pts/1        cerberus.XXX.XXX Wed May 13 16:17 - 16:19  (00:01)
XXXXXXX5  pts/1        cerberus.XXX.XXX Wed May 13 14:30 - 15:34  (01:03)
XXXXXXX5  ftp          cerberus.XXX.XXX Wed May 13 12:45 - 12:46  (00:00)
XXXXXXX5  pts/1        cerberus.XXX.XXX Wed May 13 12:33 - 12:49  (00:15)
asdfXXX1  ftp          cerberus.XXX.XXX Tue May 12 12:36 - 12:36  (00:00)
asdfXXX1  ftp          cerberus.XXX.XXX Mon May 11 09:44 - 10:00  (00:15)
spear21   ftp          cerberus.XXX.XXX Mon May 11 09:08 - 09:08  (00:00)
ftp       ftp          cerberus.XXX.XXX Mon May 11 09:05 - 09:08  (00:02)
spear21   ftp          192.168.9.157    Fri May  8 14:58 - 15:06  (00:08)
asdfXXX1  ftp          cerberus.XXX.XXX Fri May  8 10:01 - 10:01  (00:00)
XXXXXXX4  pts/5        cerberus.XXX.XXX Fri May  8 09:20 - 09:27  (00:07)
XXXXX32   ftp          cerberus.XXX.XXX Thu May  7 11:20 - 11:22  (00:02)
XXXXXXX6  pts/5        cerberus.XXX.XXX Wed May  6 21:57 - 22:28  (00:31)
XXXXX32   ftp          cerberus.XXX.XXX Tue May  5 14:51 - 14:55  (00:03)
XXXXXXX4  ftp          cerberus.XXX.XXX Tue May  5 14:44 - 14:51  (00:06)
asdfXXX1  ftp          cerberus.XXX.XXX Tue May  5 08:35 - 08:37  (00:02)
asdfXXX1  pts/1        cerberus.XXX.XXX Tue May  5 07:14 - 07:18  (00:03)
asdfXXX1  ftp          cerberus.XXX.XXX Mon May  4 08:36 - 08:53  (00:16)
XXXXXXX5  pts/1        cerberus.XXX.XXX Sat May  2 08:41 - 08:54  (00:12)
spear21   ftp          cerberus.XXX.XXX Fri May  1 16:02 - 16:03  (00:01)
spear21   ftp          cerberus.XXX.XXX Fri May  1 15:41 - 15:58  (00:16)
spear21   ftp          cerberus.XXX.XXX Fri May  1 15:40 - 15:41  (00:00)
XXXXXXX5  pts/1        cerberus.XXX.XXX Fri May  1 13:51 - 13:51  (00:00)
XXXXXXX5  pts/6        cerberus.XXX.XXX Fri May  1 11:16 - 13:51  (02:34)
asdfXXX1  ftp          cerberus.XXX.XXX Fri May  1 10:38 - 10:54  (00:15)
spear21   ftp          cerberus.XXX.XXX Fri May  1 10:32 - 10:33  (00:01)
asdfXXX1  ftp          cerberus.XXX.XXX Fri May  1 10:05 - 10:16  (00:10)
spear21   ftp          cerberus.XXX.XXX Fri May  1 09:33 - 09:33  (00:00)
javelin   ftp          cerberus.XXX.XXX Fri May  1 09:17 - 09:33  (00:15)
XXXXXXX5  ftp          cerberus.XXX.XXX Fri May  1 09:13 - 09:17  (00:04)
XXXXXXX5  pts/5        cerberus.XXX.XXX Fri May  1 08:54 - 11:16  (02:22)
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asdfXXX1  ftp          cerberus.XXX.XXX Fri May  1 07:59 - 08:07  (00:08)
spear21   ftp          cerberus.XXX.XXX Fri May  1 02:02 - 02:03  (00:00)
spear21   ftp          cerberus.XXX.XXX Thu Apr 30 23:19 - 23:25  (00:05)
XXXXXXX6  pts/6        cerberus.XXX.XXX Thu Apr 30 23:18 - 00:07  (00:48)
XXXXXXX6  pts/5        cerberus.XXX.XXX Thu Apr 30 22:31 - 23:35  (01:04)
XXXXX32   ftp          cerberus.XXX.XXX Thu Apr 30 10:10 - 10:12  (00:02)
XXXXXXX5  ftp          cerberus.XXX.XXX Wed Apr 29 15:09 - 15:09  (00:00)
XXXXXXX5  pts/5        cerberus.XXX.XXX Wed Apr 29 14:49 - 17:18  (02:29)
XXXXXXX5  ftp          cerberus.XXX.XXX Wed Apr 29 10:56 - 10:56  (00:00)
XXXXXXX5  ftp          cerberus.XXX.XXX Wed Apr 29 10:05 - 10:20  (00:15)
XXXXXXX5  ftp          cerberus.XXX.XXX Wed Apr 29 09:59 - 09:59  (00:00)
XXXXXXX5  pts/5        cerberus.XXX.XXX Wed Apr 29 09:50 - 14:22  (04:32)
XXXXX32   ftp          cerberus.XXX.XXX Wed Apr 29 09:13 - 09:14  (00:00)
ftp       ftp          cerberus.XXX.XXX Wed Apr 29 09:10 - 09:11  (00:00)
ftp       ftp          cerberus.XXX.XXX Wed Apr 29 09:08 - 09:10  (00:01)
ftp       ftp          cerberus.XXX.XXX Wed Apr 29 09:08 - 09:08  (00:00)
ftp       ftp          cerberus.XXX.XXX Wed Apr 29 09:08 - 09:08  (00:00)
ftp       ftp          cerberus.XXX.XXX Wed Apr 29 09:08 - 09:08  (00:00)
ftp       ftp          cerberus.XXX.XXX Wed Apr 29 09:07 - 09:08  (00:00)
XXXXXXX4  ftp          cerberus.XXX.XXX Tue Apr 28 14:06 - 14:18  (00:11)
XXXXXXX4  ftp          cerberus.XXX.XXX Tue Apr 28 13:42 - 13:43  (00:01)
XXXXXXX4  ftp          cerberus.XXX.XXX Tue Apr 28 13:06 - 13:42  (00:35)
XXXXXXX4  ftp          cerberus.XXX.XXX Tue Apr 28 11:18 - 11:25  (00:07)
XXXXXXX4  ftp          cerberus.XXX.XXX Tue Apr 28 11:10 - 11:18  (00:08)
XXXXXXX6  pts/5        mailman.XXX.XXX  Mon Apr 27 15:13 - 15:29  (00:15)
XXXXXXX6  ftp          seki             Mon Apr 27 12:24 - 12:26  (00:02)
XXXXXXX6  pts/5        cerberus.XXX.XXX Mon Apr 27 12:09 - 14:26  (02:16)
asdfXXX1  ftp          cerberus.XXX.XXX Mon Apr 27 08:38 - 08:38  (00:00)
asdfXXX1  ftp          cerberus.XXX.XXX Mon Apr 27 08:16 - 08:17  (00:00)
XXXXX32   ftp          cerberus.XXX.XXX Mon Apr 27 08:07 - 08:09  (00:01)
asdfXXX1  ftp          cerberus.XXX.XXX Mon Apr 27 07:42 - 08:07  (00:25)
asdfXXX1  pts/5        cerberus.XXX.XXX Mon Apr 27 07:40 - 08:00  (00:19)
asdfXXX1  ftp          cerberus.XXX.XXX Mon Apr 27 07:05 - 07:11  (00:06)
asdfXXX1  pts/5        cerberus.XXX.XXX Mon Apr 27 06:47 - 07:15  (00:27)
asdfXXX1  pts/5        cerberus.XXX.XXX Mon Apr 27 06:44 - 06:47  (00:02)
XXXXXXX6  ftp          cerberus.XXX.XXX Sat Apr 25 01:52 - 01:52  (00:00)
XXXXXXX6  pts/5        cerberus.XXX.XXX Sat Apr 25 01:41 - 02:09  (00:28)
root      console      :0               Fri Apr 24 13:46 - 09:36 (13+19:49)
asdfXXX1  pts/2        cerberus.XXX.XXX Fri Apr 24 07:58 - 07:59  (00:00)
ftp       ftp          cerberus.XXX.XXX Thu Apr 23 13:03 - 13:04  (00:01)
XXXXXXX5  pts/3        cerberus.XXX.XXX Wed Apr 22 15:54 - 18:03  (02:09)
XXXXXXX6  ftp          cerberus.XXX.XXX Wed Apr 22 15:53 - 15:54  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Wed Apr 22 15:46 - 15:47  (00:00)
XXXXXXX6  pts/2        cerberus.XXX.XXX Wed Apr 22 15:45 - 18:16  (02:31)
XXXXXXX6  ftp          cerberus.XXX.XXX Wed Apr 22 15:36 - 15:38  (00:01)
XXXXXXX6  ftp          cerberus.XXX.XXX Wed Apr 22 15:35 - 15:36  (00:00)
XXXXXXX6  pts/2        cerberus.XXX.XXX Wed Apr 22 15:33 - 15:40  (00:07)
XXXXXXX5  ftp          cerberus.XXX.XXX Wed Apr 22 14:13 - 14:13  (00:00)
XXXXXXX5  pts/4        cerberus.XXX.XXX Wed Apr 22 13:31 - 14:12  (00:41)
XXXX4     ftp          cerberus.XXX.XXX Wed Apr 22 13:30 - 13:30  (00:00)
XXXX4     ftp          cerberus.XXX.XXX Wed Apr 22 13:28 - 13:29  (00:00)
XXXX4     ftp          cerberus.XXX.XXX Wed Apr 22 13:28 - 13:28  (00:00)
XXXX2     ftp          cerberus.XXX.XXX Wed Apr 22 13:17 - 13:24  (00:06)
XXXX2     ftp          cerberus.XXX.XXX Wed Apr 22 13:12 - 13:12  (00:00)
XXXX2     ftp          cerberus.XXX.XXX Wed Apr 22 13:10 - 13:10  (00:00)
XXXX2     ftp          cerberus.XXX.XXX Wed Apr 22 13:09 - 13:10  (00:00)
XXXX2     ftp          cerberus.XXX.XXX Wed Apr 22 13:08 - 13:09  (00:00)
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XXXX2     ftp          cerberus.XXX.XXX Wed Apr 22 13:07 - 13:08  (00:01)
XXXXXXX6  pts/3        cerberus.XXX.XXX Wed Apr 22 12:39 - 15:39  (02:59)
XXXXXXX5  pts/2        cerberus.XXX.XXX Wed Apr 22 12:16 - 14:36  (02:20)
root      console      :0               Wed Apr 22 11:09 - 11:11  (00:02)
XXXXXXX5  pts/2        cerberus.XXX.XXX Wed Apr 22 09:38 - 11:39  (02:01)
XXXXXXX5  pts/2        cerberus.XXX.XXX Wed Apr 22 09:36 - 09:37  (00:01)
XXXXXXX5  pts/2        cerberus.XXX.XXX Wed Apr 22 09:34 - 09:35  (00:01)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Apr 21 23:14 - 23:15  (00:00)
XXXXXXX6  pts/2        cerberus.XXX.XXX Tue Apr 21 22:38 - 00:18  (01:39)
XXXXXXX6  ftp          seki             Tue Apr 21 14:10 - 14:11  (00:00)
milhaton  ftp          asdfasd.w00t.org Tue Apr 21 12:26 - 12:37  (00:11)
root      console      :0               Tue Apr 21 10:04 - 10:11  (00:07)
XXXXX32   ftp          kuko-dmz         Tue Apr 21 09:38 - 09:38  (00:00)
XXXXXXX6  pts/2        kuko-dmz         Tue Apr 21 09:11 - 09:37  (00:26)
XXXXX32   ftp          kuko-dmz         Tue Apr 21 09:10 - 09:10  (00:00)
XXXXX32   ftp          kuko-dmz         Tue Apr 21 09:07 - 09:08  (00:00)
XXXXX32   ftp          SECURE8.foob.edu Mon Apr 20 14:49 - 14:57  (00:08)
XXXXX32   ftp          SECUREj.foob.edu Mon Apr 20 14:48 - 14:48  (00:00)
XXXXX32   ftp          SECURE4.foob.edu Mon Apr 20 14:47 - 14:47  (00:00)
XXXXX32   ftp          SECURE5.foob.edu Mon Apr 20 14:39 - 14:39  (00:00)
ftp       ftp          SECURE2.foob.edu Mon Apr 20 14:33 - 14:35  (00:01)
XXXXX32   ftp          SECURE8.foob.edu Mon Apr 20 14:32 - 14:32  (00:00)
ftp       ftp          SECUREj.foob.edu Mon Apr 20 14:24 - 14:24  (00:00)
XXXXX32   ftp          SECURE2.foob.edu Mon Apr 20 14:11 - 14:24  (00:13)
XXXXXXX6  pts/2        cerberus.XXX.XXX Mon Apr 20 10:07 - 10:08  (00:00)
XXXXX32   ftp          cerberus.XXX.XXX Mon Apr 20 10:07 - 10:08  (00:01)
XXXXX32   ftp          cerberus.XXX.XXX Mon Apr 20 09:53 - 09:56  (00:03)
ftp       ftp          cerberus.XXX.XXX Mon Apr 20 07:05 - 07:05  (00:00)
XXXXXXX5  ftp          cerberus.XXX.XXX Fri Apr 17 16:58 - 16:59  (00:00)
XXXXXXX5  pts/2        cerberus.XXX.XXX Fri Apr 17 16:53 - 17:35  (00:41)
XXXXXXX6  ftp          cerberus.XXX.XXX Fri Apr 17 10:10 - 10:10  (00:00)
XXXXXXX6  pts/2        cerberus.XXX.XXX Fri Apr 17 08:58 - 11:11  (02:13)
XXXXX32   ftp          cerberus.XXX.XXX Fri Apr 17 07:45 - 08:02  (00:16)
XXXXXXX5  ftp          cerberus.XXX.XXX Thu Apr 16 20:41 - 20:42  (00:00)
XXXXXXX4  pts/2        cerberus.XXX.XXX Thu Apr 16 15:13 - 15:19  (00:05)
XXXXXXX4  pts/2        cerberus.XXX.XXX Thu Apr 16 11:16 - 11:45  (00:29)
ftp       ftp          cerberus.XXX.XXX Thu Apr 16 08:50 - 09:07  (00:16)
ftp       ftp          cerberus.XXX.XXX Thu Apr 16 08:50 - 08:50  (00:00)
XXXXXXX5  pts/2        cerberus.XXX.XXX Wed Apr 15 17:56 - 18:09  (00:12)
XXXXXXX6  pts/2        cerberus.XXX.XXX Wed Apr 15 11:05 - 11:34  (00:29)
XXXXX32   ftp          cerberus.XXX.XXX Wed Apr 15 11:04 - 11:05  (00:00)
XXXXX32   ftp          192.168.77.226   Wed Apr 15 07:37 - 07:39  (00:02)
ftp       ftp          192.168.77.226   Wed Apr 15 07:30 - 07:37  (00:07)
asdfXXX1  pts/2        cerberus.XXX.XXX Wed Apr 15 07:20 - 07:21  (00:01)
XXXXXXX5  pts/2        cerberus.XXX.XXX Tue Apr 14 20:13 - 20:17  (00:03)
ftp       ftp          cerberus.XXX.XXX Tue Apr 14 15:34 - 15:34  (00:00)
ftp       ftp          cerberus.XXX.XXX Tue Apr 14 15:34 - 15:34  (00:00)
ftp       ftp          cerberus.XXX.XXX Tue Apr 14 15:33 - 15:34  (00:00)
XXXXX32   ftp          cerberus.XXX.XXX Tue Apr 14 15:30 - 15:33  (00:03)
XXXXXXX6  pts/2        cerberus.XXX.XXX Mon Apr 13 23:11 - 23:25  (00:13)
XXXXXXX6  pts/2        cerberus.XXX.XXX Mon Apr 13 09:51 - 12:40  (02:48)
XXXXXXX6  pts/2        cerberus.XXX.XXX Sat Apr 11 11:34 - 12:48  (01:14)
XXXXXXX5  pts/2        cerberus.XXX.XXX Fri Apr 10 12:34 - 13:58  (01:24)
asdfXXX1  pts/3        cerberus.XXX.XXX Fri Apr 10 09:54 - 09:54  (00:00)
XXXXXXX5  ftp          cerberus.XXX.XXX Fri Apr 10 09:32 - 09:32  (00:00)
XXXXXXX5  ftp          cerberus.XXX.XXX Fri Apr 10 09:23 - 09:24  (00:00)
XXXXXXX5  pts/2        cerberus.XXX.XXX Fri Apr 10 08:32 - 10:22  (01:50)
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XXXXX32   ftp          cerberus.XXX.XXX Thu Apr  9 17:43 - 17:45  (00:02)
XXXXX32   ftp          woogah.foobar.c  Thu Apr  9 17:07 - 17:43  (00:35)
XXXXXXX6  pts/2        cerberus.XXX.XXX Thu Apr  9 16:53 - 16:54  (00:00)
XXXXXXX6  pts/2        10k.singingbeagl Thu Apr  9 01:42 - 04:09  (02:27)
XXXXXXX5  ftp          cerberus.XXX.XXX Wed Apr  8 17:02 - 17:03  (00:00)
XXXXXXX5  ftp          cerberus.XXX.XXX Wed Apr  8 16:59 - 17:00  (00:00)
XXXXXXX5  pts/2        cerberus.XXX.XXX Wed Apr  8 15:23 - 17:04  (01:40)
XXXXXXX5  ftp          cerberus.XXX.XXX Wed Apr  8 10:55 - 10:56  (00:00)
XXXXXXX5  ftp          cerberus.XXX.XXX Wed Apr  8 10:13 - 10:13  (00:00)
XXXXXXX5  pts/2        cerberus.XXX.XXX Wed Apr  8 09:28 - 11:38  (02:09)
XXXXXXX6  ftp          cerberus.XXX.XXX Wed Apr  8 02:59 - 03:00  (00:01)
XXXXXXX6  pts/3        cerberus.XXX.XXX Wed Apr  8 02:53 - 03:01  (00:08)
XXXXXXX6  pts/5        cerberus.XXX.XXX Wed Apr  8 01:16 - 02:01  (00:45)
XXXXXXX6  pts/4        cerberus.XXX.XXX Wed Apr  8 01:12 - 02:45  (01:32)
XXXXXXX6  pts/3        cerberus.XXX.XXX Wed Apr  8 01:08 - 02:45  (01:37)
XXXXXXX6  ftp          cerberus.XXX.XXX Wed Apr  8 00:59 - 01:00  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Wed Apr  8 00:58 - 00:58  (00:00)
XXXXXXX6  pts/2        cerberus.XXX.XXX Wed Apr  8 00:52 - 02:53  (02:00)
XXXXXXX4  ftp          mailman.XXX.XXX  Tue Apr  7 15:56 - 15:57  (00:01)
XXXXXXX4  pts/6        cerberus.XXX.XXX Tue Apr  7 15:34 - 16:25  (00:51)
XXXXXXX4  ftp          mailman.XXX.XXX  Tue Apr  7 14:15 - 14:20  (00:04)
ftp       ftp          cerberus.XXX.XXX Tue Apr  7 14:09 - 14:15  (00:05)
milhaton  ftp          cerberus.XXX.XXX Tue Apr  7 13:59 - 14:00  (00:00)
root      console      :0               Tue Apr  7 13:51 - 16:54  (03:03)
XXXXXXX4  pts/2        cerberus.XXX.XXX Tue Apr  7 12:20 - 13:12  (00:52)
XXXXXXX4  pts/2        cerberus.XXX.XXX Tue Apr  7 11:32 - 11:32  (00:00)
XXXXXXX6  pts/2        cerberus.XXX.XXX Mon Apr  6 18:15 - 18:15  (00:00)
XXXXXXX6  pts/2        cerberus.XXX.XXX Mon Apr  6 17:34 - 18:13  (00:38)
XXXXXXX6  pts/2        cerberus.XXX.XXX Mon Apr  6 17:05 - 17:22  (00:17)
XXXXXXX6  pts/2        cerberus.XXX.XXX Sat Apr  4 18:24 - 21:06  (02:42)
XXXXXXX6  pts/2        cerberus.XXX.XXX Sat Apr  4 18:06 - 18:23  (00:16)
XXXXXXX4  ftp          cerberus.XXX.XXX Fri Apr  3 10:25 - 10:26  (00:00)
XXXXXXX4  pts/2        cerberus.XXX.XXX Fri Apr  3 10:23 - 13:02  (02:39)
ftp       ftp          cerberus.XXX.XXX Fri Apr  3 09:51 - 09:51  (00:00)
ftp       ftp          cerberus.XXX.XXX Fri Apr  3 09:51 - 09:51  (00:00)
ftp       ftp          cerberus.XXX.XXX Fri Apr  3 09:51 - 09:51  (00:00)
ftp       ftp          cerberus.XXX.XXX Fri Apr  3 09:51 - 09:51  (00:00)
ftp       ftp          cerberus.XXX.XXX Fri Apr  3 09:51 - 09:51  (00:00)
ftp       ftp          cerberus.XXX.XXX Fri Apr  3 09:50 - 09:51  (00:00)
XXXXXXX4  pts/2        cerberus.XXX.XXX Fri Apr  3 08:58 - 09:20  (00:22)
XXXXXXX6  pts/2        cerberus.XXX.XXX Fri Apr  3 08:42 - 08:57  (00:14)
milhaton  pts/2        cerberus.XXX.XXX Fri Apr  3 08:42 - 08:42  (00:00)
XXXXXXX5  ftp          cerberus.XXX.XXX Fri Apr  3 08:18 - 08:18  (00:00)
XXXXXXX5  ftp          cerberus.XXX.XXX Fri Apr  3 07:42 - 07:43  (00:00)
XXXXXXX5  ftp          cerberus.XXX.XXX Fri Apr  3 07:29 - 07:30  (00:00)
XXXXXXX5  pts/2        cerberus.XXX.XXX Fri Apr  3 07:09 - 08:19  (01:10)
ftp       ftp          10k.singingbeagl Fri Apr  3 01:32 - 01:48  (00:16)
milhaton  ftp          10k.singingbeagl Fri Apr  3 01:30 - 01:32  (00:01)
XXXXXXX6  ftp          10k.singingbeagl Fri Apr  3 01:27 - 01:30  (00:02)
XXXXXXX6  ftp          10k.singingbeagl Fri Apr  3 01:25 - 01:26  (00:00)
milhaton  ftp          10k.singingbeagl Fri Apr  3 01:23 - 01:25  (00:01)
XXXXXXX6  ftp          10k.singingbeagl Fri Apr  3 01:22 - 01:23  (00:00)
milhaton  ftp          10k.singingbeagl Fri Apr  3 01:04 - 01:04  (00:00)
milhaton  ftp          10k.singingbeagl Fri Apr  3 00:57 - 00:57  (00:00)
milhaton  ftp          10k.singingbeagl Fri Apr  3 00:56 - 00:57  (00:00)
milhaton  ftp          10k.singingbeagl Fri Apr  3 00:54 - 00:54  (00:00)
milhaton  ftp          10k.singingbeagl Fri Apr  3 00:53 - 00:53  (00:00)
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XXXXXXX6  ftp          10k.singingbeagl Fri Apr  3 00:43 - 00:43  (00:00)
milhaton  ftp          10k.singingbeagl Fri Apr  3 00:43 - 00:43  (00:00)
milhaton  ftp          10k.singingbeagl Fri Apr  3 00:34 - 00:34  (00:00)
ftp       ftp          10k.singingbeagl Fri Apr  3 00:26 - 00:34  (00:08)
ftp       ftp          10k.singingbeagl Fri Apr  3 00:21 - 00:26  (00:04)
ftp       ftp          10k.singingbeagl Fri Apr  3 00:19 - 00:21  (00:02)
ftp       ftp          10k.singingbeagl Fri Apr  3 00:17 - 00:17  (00:00)
milhaton  ftp          10k.singingbeagl Fri Apr  3 00:12 - 00:13  (00:01)
milhaton  ftp          10k.singingbeagl Fri Apr  3 00:11 - 00:12  (00:00)
XXXXXXX6  ftp          10k.singingbeagl Fri Apr  3 00:10 - 00:10  (00:00)
XXXXXXX6  ftp          10k.singingbeagl Fri Apr  3 00:09 - 00:09  (00:00)
XXXXX32   ftp          10k.singingbeagl Fri Apr  3 00:09 - 00:09  (00:00)
milhaton  ftp          10k.singingbeagl Fri Apr  3 00:08 - 00:09  (00:00)
milhaton  ftp          10k.singingbeagl Fri Apr  3 00:06 - 00:08  (00:01)
XXXXXXX6  ftp          10k.singingbeagl Fri Apr  3 00:01 - 00:01  (00:00)
ftp       ftp          10k.singingbeagl Fri Apr  3 00:00 - 00:01  (00:00)
ftp       ftp          10k.singingbeagl Thu Apr  2 23:59 - 00:00  (00:01)
XXXXXXX6  pts/3        cerberus.XXX.XXX Thu Apr  2 23:46 - 03:39  (03:53)
ftp       ftp          10k.singingbeagl Thu Apr  2 23:38 - 23:39  (00:00)
XXXXXXX6  ftp          10k.singingbeagl Thu Apr  2 23:37 - 23:38  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Thu Apr  2 23:36 - 23:36  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Thu Apr  2 23:35 - 23:35  (00:00)
XXXXXXX6  ftp          10k.singingbeagl Thu Apr  2 23:13 - 23:14  (00:01)
XXXXXXX6  ftp          cerberus.XXX.XXX Thu Apr  2 23:07 - 23:07  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Thu Apr  2 23:06 - 23:07  (00:00)
ftp       ftp          10k.singingbeagl Thu Apr  2 22:51 - 22:51  (00:00)
ftp       ftp          10k.singingbeagl Thu Apr  2 22:32 - 22:32  (00:00)
XXXXXXX6  pts/3        10k.singingbeagl Thu Apr  2 22:27 - 22:28  (00:00)
XXXXXXX6  pts/2        cerberus.XXX.XXX Thu Apr  2 22:18 - 01:51  (03:33)
XXXXXXX6  pts/2        10k.singingbeagl Thu Apr  2 22:14 - 22:15  (00:00)
XXXXXXX6  pts/2        10k.singingbeagl Thu Apr  2 22:09 - 22:14  (00:04)
XXXXXXX6  ftp          10k.singingbeagl Thu Apr  2 22:07 - 22:08  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Thu Apr  2 21:52 - 21:53  (00:00)
XXXXXXX6  ftp          kuko-dmz         Thu Apr  2 14:18 - 14:18  (00:00)
XXXXXXX6  ftp          kuko-dmz         Thu Apr  2 14:18 - 14:18  (00:00)
XXXXXXX6  pts/3        kuko-dmz         Thu Apr  2 14:16 - 16:17  (02:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Thu Apr  2 13:36 - 13:36  (00:00)
XXXXXXX6  pts/2        cerberus.XXX.XXX Thu Apr  2 13:34 - 16:14  (02:39)
XXXXXXX6  pts/2        192.168.84.66    Wed Apr  1 18:50 - 18:53  (00:02)
root      ftp          cerberus.XXX.XXX Wed Apr  1 18:03 - 18:03  (00:00)
root      ftp          cerberus.XXX.XXX Wed Apr  1 18:01 - 18:01  (00:00)
root      ftp          cerberus.XXX.XXX Wed Apr  1 18:01 - 18:01  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Wed Apr  1 18:00 - 18:01  (00:00)
XXXXXXX6  pts/2        cerberus.XXX.XXX Wed Apr  1 17:59 - 18:47  (00:47)
ftp       ftp          cerberus.XXX.XXX Wed Apr  1 17:38 - 17:46  (00:07)
XXXXXXX6  pts/2        cerberus.XXX.XXX Wed Apr  1 15:14 - 15:17  (00:03)
XXXXXXX6  pts/2        cerberus.XXX.XXX Wed Apr  1 14:29 - 14:49  (00:20)
XXXXXXX6  ftp          192.168.84.66    Wed Apr  1 14:28 - 14:28  (00:00)
root      console      :0               Wed Apr  1 14:21 - 14:22  (00:00)
XXXXXXX5  pts/2        cerberus.XXX.XXX Wed Apr  1 14:00 - 14:06  (00:06)
root      console      :0               Wed Apr  1 10:32 - 11:47  (01:15)
XXXXXXX6  pts/3        cerberus.XXX.XXX Sun Mar 29 18:10 - 18:18  (00:08)
XXXXXXX6  pts/2        cerberus.XXX.XXX Sun Mar 29 17:16 - 20:14  (02:58)
ftp       ftp          cerberus.XXX.XXX Sun Mar 29 17:00 - 17:00  (00:00)
ftp       ftp          cerberus.XXX.XXX Sun Mar 29 16:59 - 16:59  (00:00)
XXXXXXX5  pts/1        cerberus.XXX.XXX Fri Mar 27 14:48 - 15:20  (00:32)
root      console      :0               Fri Mar 27 13:45 - 13:48  (00:02)
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XXXXXXX5  ftp          cerberus.XXX.XXX Fri Mar 27 11:49 - 11:49  (00:00)
XXXXXXX5  pts/2        cerberus.XXX.XXX Fri Mar 27 11:38 - 11:48  (00:10)
XXXXXXX5  ftp          cerberus.XXX.XXX Fri Mar 27 10:58 - 10:58  (00:00)
XXXXXXX5  ftp          cerberus.XXX.XXX Fri Mar 27 10:39 - 10:40  (00:00)
XXXXXXX5  pts/4        cerberus.XXX.XXX Fri Mar 27 10:05 - 10:38  (00:33)
XXXXXXX5  ftp          cerberus.XXX.XXX Fri Mar 27 09:52 - 09:52  (00:00)
XXXXXXX5  pts/1        cerberus.XXX.XXX Fri Mar 27 09:46 - 12:35  (02:49)
XXXXXXX6  pts/1        cerberus.XXX.XXX Wed Mar 25 16:24 - 16:43  (00:19)
XXXXXXX6  ftp          cerberus.XXX.XXX Wed Mar 25 15:36 - 15:37  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Wed Mar 25 15:33 - 15:33  (00:00)
XXXXXXX5  pts/5        cerberus.XXX.XXX Wed Mar 25 15:31 - 15:35  (00:03)
XXXXXXX5  pts/5        cerberus.XXX.XXX Wed Mar 25 15:04 - 15:22  (00:17)
XXXXXXX5  pts/5        cerberus.XXX.XXX Wed Mar 25 15:04 - 15:04  (00:00)
XXXXXXX6  pts/4        cerberus.XXX.XXX Wed Mar 25 15:00 - 16:44  (01:43)
XXXXXXX6  ftp          cerberus.XXX.XXX Wed Mar 25 15:00 - 15:15  (00:15)
XXXXXXX5  pts/2        cerberus.XXX.XXX Wed Mar 25 14:45 - 15:23  (00:37)
XXXXXXX5  ftp          cerberus.XXX.XXX Wed Mar 25 14:45 - 14:45  (00:00)
XXXXXXX6  pts/2        cerberus.XXX.XXX Wed Mar 25 14:21 - 14:21  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Wed Mar 25 14:21 - 14:21  (00:00)
XXXXXXX6  pts/1        cerberus.XXX.XXX Wed Mar 25 13:28 - 15:40  (02:11)
XXXXXXX5  pts/1        cerberus.XXX.XXX Wed Mar 25 12:42 - 13:18  (00:35)
XXXXXXX5  ftp          cerberus.XXX.XXX Wed Mar 25 12:15 - 12:16  (00:00)
XXXXXXX5  ftp          cerberus.XXX.XXX Wed Mar 25 10:03 - 10:03  (00:00)
XXXXXXX5  ftp          cerberus.XXX.XXX Wed Mar 25 10:01 - 10:02  (00:00)
XXXXXXX5  pts/1        cerberus.XXX.XXX Wed Mar 25 09:55 - 12:23  (02:28)
XXXXXXX5  ftp          cerberus.XXX.XXX Wed Mar 25 09:54 - 09:54  (00:00)
XXXXXXX5  pts/4        cerberus.XXX.XXX Wed Mar 25 09:25 - 09:52  (00:27)
XXXXXXX6  pts/4        cerberus.XXX.XXX Tue Mar 24 18:04 - 18:05  (00:00)
root      console      :0               Tue Mar 24 17:38 - 09:49  (16:10)
root      console      :0               Mon Mar 23 18:50 - 19:03  (00:12)
root      console      :0               Mon Mar 23 18:47 - 18:48  (00:00)
reboot    system boot                   Thu Mar 19 12:45
root      console      :0               Thu Mar 19 12:15 - 12:16  (00:01)
XXXXXXX5  pts/1        192.168.84.65    Thu Mar 19 11:10 - 11:13  (00:02)
XXXXXXX5  console                       Thu Mar 19 11:06 - 11:11  (00:04)
XXXXXXX5  console      :0               Thu Mar 19 11:05 - 11:06  (00:00)
XXXXXXX5  console      :0               Thu Mar 19 11:05 - 11:05  (00:00)
XXXXXXX5  console      :0               Thu Mar 19 11:05 - 11:05  (00:00)
XXXXXXX5  console      :0               Thu Mar 19 11:04 - 11:04  (00:00)
XXXXXXX6  pts/1        cerberus.XXX.XXX Wed Mar 11 16:26 - 17:56  (01:30)
root      console      :0               Wed Mar 11 14:41 - 14:51  (00:09)
root      console      :0               Wed Mar 11 12:37 - 12:38  (00:01)
root      console      :0               Wed Mar 11 12:29 - 12:34  (00:04)
root      console      :0               Wed Mar 11 10:38 - 10:43  (00:04)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Mar 10 19:03 - 19:03  (00:00)
XXXXXXX6  ftp          192.168.84.200   Tue Mar 10 19:01 - 19:01  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Mar 10 18:55 - 18:55  (00:00)
XXXXXXX6  pts/3        cerberus.XXX.XXX Tue Mar 10 18:23 - 19:33  (01:10)
root      console      :0               Tue Mar 10 15:33 - 15:57  (00:23)
ftp       ftp          cerberus.XXX.XXX Wed Feb 25 10:21 - 10:21  (00:00)
ftp       ftp          cerberus.XXX.XXX Wed Feb 25 10:20 - 10:21  (00:00)
XXXXXXX6  pts/5        cerberus.XXX.XXX Wed Feb 25 09:59 - 12:11  (02:11)
XXXXXXX5  pts/7        cerberus.XXX.XXX Wed Feb 25 09:53 - 10:10  (00:16)
XXXXXXX6  pts/6        cerberus.XXX.XXX Wed Feb 25 09:52 - 12:02  (02:10)
XXXXXXX5  pts/5        cerberus.XXX.XXX Wed Feb 25 09:44 - 09:54  (00:09)
XXXXXXX6  pts/4        cerberus.XXX.XXX Wed Feb 25 09:34 - 11:44  (02:10)
XXXXXXX6  pts/3        cerberus.XXX.XXX Wed Feb 25 09:15 - 11:26  (02:10)
```

```
XXXXX32   ftp          cerberus.XXX.XXX Tue Feb 24 18:07 - 18:08  (00:00)
ftp       ftp          cerberus.XXX.XXX Tue Feb 24 17:57 - 17:58  (00:00)
XXXXXXX6  pts/4        cerberus.XXX.XXX Tue Feb 24 17:57 - 18:08  (00:11)
ftp       ftp          cerberus.XXX.XXX Tue Feb 24 17:46 - 17:48  (00:01)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Feb 24 17:46 - 17:46  (00:00)
ftp       ftp          cerberus.XXX.XXX Tue Feb 24 17:41 - 17:43  (00:02)
ftp       ftp          cerberus.XXX.XXX Tue Feb 24 17:33 - 17:35  (00:01)
ftp       ftp          cerberus.XXX.XXX Tue Feb 24 17:32 - 17:32  (00:00)
ftp       ftp          cerberus.XXX.XXX Tue Feb 24 17:31 - 17:32  (00:00)
ftp       ftp          cerberus.XXX.XXX Tue Feb 24 17:28 - 17:31  (00:03)
ftp       ftp          cerberus.XXX.XXX Tue Feb 24 17:26 - 17:28  (00:01)
ftp       ftp          cerberus.XXX.XXX Tue Feb 24 17:25 - 17:26  (00:00)
ftp       ftp          cerberus.XXX.XXX Tue Feb 24 17:17 - 17:25  (00:07)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Feb 24 17:17 - 17:17  (00:00)
XXXXXXX6  pts/3        cerberus.XXX.XXX Tue Feb 24 17:16 - 20:01  (02:45)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Feb 24 17:04 - 17:17  (00:13)
XXXXXXX6  pts/8        cerberus.XXX.XXX Tue Feb 24 16:27 - 19:22  (02:55)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Feb 24 16:26 - 16:41  (00:15)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Feb 24 16:24 - 16:24  (00:00)
XXXXXXX6  pts/7        cerberus.XXX.XXX Tue Feb 24 16:21 - 18:35  (02:13)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Feb 24 16:20 - 16:20  (00:00)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Feb 24 15:50 - 16:06  (00:15)
XXXXXXX6  pts/6        cerberus.XXX.XXX Tue Feb 24 15:02 - 18:18  (03:16)
XXXXXXX6  pts/5        cerberus.XXX.XXX Tue Feb 24 14:55 - 17:06  (02:10)
XXXXXXX6  pts/4        cerberus.XXX.XXX Tue Feb 24 14:41 - 16:53  (02:11)
XXXXXXX6  pts/3        cerberus.XXX.XXX Tue Feb 24 14:24 - 16:50  (02:25)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Feb 24 14:20 - 14:36  (00:15)
XXXXXXX6  pts/5        cerberus.XXX.XXX Tue Feb 24 11:25 - 13:38  (02:13)
XXXXXXX6  pts/4        cerberus.XXX.XXX Tue Feb 24 11:09 - 13:29  (02:20)
XXXXXXX6  ftp          cerberus.XXX.XXX Tue Feb 24 11:08 - 11:08  (00:00)
XXXXXXX6  pts/3        cerberus.XXX.XXX Tue Feb 24 11:06 - 13:15  (02:08)
XXXXXXX6  pts/3        cerberus.XXX.XXX Sun Feb 22 15:16 - 17:29  (02:13)
XXXXXXX5  pts/3        cerberus.XXX.XXX Tue Feb 17 14:05 - 14:09  (00:03)
XXXXXXX5  pts/3        cerberus.XXX.XXX Tue Feb 17 13:50 - 13:54  (00:04)
XXXXXXX5  pts/1        cerberus.XXX.XXX Fri Feb 13 14:29 - 14:31  (00:02)
XXXXXXX5  ftp          cerberus.XXX.XXX Fri Feb 13 14:29 - 14:29  (00:00)
XXXXXXX5  pts/1        cerberus.XXX.XXX Fri Feb 13 12:07 - 14:22  (02:15)
XXXXXXX5  pts/3        cerberus.XXX.XXX Fri Feb 13 10:45 - 13:01  (02:15)
XXXXXXX5  ftp          cerberus.XXX.XXX Fri Feb 13 10:38 - 10:38  (00:00)
XXXXXXX5  pts/1        cerberus.XXX.XXX Fri Feb 13 10:34 - 10:45  (00:10)
XXXXXXX5  ftp          cerberus.XXX.XXX Fri Feb 13 10:33 - 10:33  (00:00)
XXXXXXX5  pts/1        cerberus.XXX.XXX Fri Feb 13 10:11 - 10:34  (00:23)
XXXXXXX5  pts/2        cerberus.XXX.XXX Fri Feb 13 10:00 - 10:11  (00:10)
XXXXXXX5  pts/2        cerberus.XXX.XXX Fri Feb 13 10:00 - 10:00  (00:00)
XXXXXXX5  pts/1        cerberus.XXX.XXX Fri Feb 13 09:45 - 10:01  (00:15)
XXXXXXX5  pts/1        cerberus.XXX.XXX Fri Feb 13 09:37 - 09:45  (00:08)
XXXXXXX5  pts/2        cerberus.XXX.XXX Fri Feb 13 09:34 - 09:35  (00:01)
XXXXXXX5  ftp          cerberus.XXX.XXX Fri Feb 13 09:30 - 09:33  (00:03)
XXXXXXX5  ftp          cerberus.XXX.XXX Fri Feb 13 09:16 - 09:21  (00:05)
XXXXXXX5  pts/1        cerberus.XXX.XXX Fri Feb 13 09:15 - 09:35  (00:19)
XXXXXXX6  pts/2        cerberus.XXX.XXX Thu Feb 12 16:04 - 18:23  (02:18)
XXXXXXX2  pts/1        cerberus.XXX.XXX Thu Feb 12 15:49 - 18:05  (02:16)
XXXXXXX2  pts/1        cerberus.XXX.XXX Wed Feb 11 16:57 - 16:58  (00:00)
XXXXXXX2  pts/1        cerberus.XXX.XXX Wed Feb 11 16:56 - 16:57  (00:01)
XXXXXXX5  pts/2        cerberus.XXX.XXX Wed Feb 11 16:48 - 16:49  (00:01)
XXXXXXX2  pts/1        cerberus.XXX.XXX Wed Feb 11 16:47 - 16:51  (00:03)
XXXXXXX5  pts/1        cerberus.XXX.XXX Wed Feb 11 16:18 - 16:18  (00:00)
```

```
XXXXXXX2  pts/4        localhost        Wed Feb 11 16:15 - 16:15  (00:00)
root      console      :0               Wed Feb 11 16:07 - 16:17  (00:10)
root      console      :0               Wed Feb 11 10:18 - 10:22  (00:04)
reboot    system boot                   Mon Feb  9 15:19
root      console      :0               Mon Feb  2 09:19 - down  (7+06:00)
root      console      :0               Mon Feb  2 09:18 - 09:18  (00:00)
root      console      :0               Fri Jan 30 13:38 - 14:24  (00:46)
root      console      :0               Fri Jan 30 13:01 - 13:31  (00:29)
root      console      :0               Thu Jan 29 09:08 - 10:02  (00:53)
root      console      :0               Wed Jan 28 16:08 - 16:24  (00:16)
reboot    system boot                   Wed Jan 28 16:06
root      console      :0               Wed Jan 28 16:03 - 16:06  (00:02)
root      console      :0               Wed Jan 28 16:02 - 16:03  (00:01)
reboot    system boot                   Wed Jan 28 15:56
root      console      :0               Wed Jan 28 15:19 - 15:56  (00:37)
root      ftp          192.168.84.65    Wed Jan 28 15:13 - 15:16  (00:02)
root      console      :0               Tue Jan 27 18:00 - 18:03  (00:02)
reboot    system boot                   Tue Jan 27 17:59
root      ftp          192.168.84.65    Tue Jan 27 17:27 - 17:32  (00:04)
root      console      :0               Tue Jan 27 17:26 - 17:58  (00:32)
root      console      :0               Mon Jan 26 17:51 - 17:54  (00:02)
reboot    system boot                   Mon Jan 26 17:49
root      console      :0               Mon Jan 26 17:31 - 17:49  (00:17)
reboot    system boot                   Mon Jan 26 17:25

wtmp begins Mon Jan 26 17:25

# logins -x
root            0       other           1       Super-User
                        /
                        /sbin/sh
                        PS 120699 -1 -1 -1
smtp            0       root            0       Mail Daemon User
                        /
                        /sbin/sh
                        LK 082587 -1 -1 -1
daemon          1       other           1
                        /
                        /sbin/sh
                        LK 082587 -1 -1 -1
bin             2       bin             2
                        /usr/bin
                        /sbin/sh
                        LK 082587 -1 -1 -1
sys             3       sys             3
                        /
                        /sbin/sh
                        LK 082587 -1 -1 -1
adm             4       adm             4       Admin
                        /var/adm
                        /sbin/sh
                        LK 082587 -1 -1 -1
uucp            5       uucp            5       uucp Admin
                        /usr/lib/uucp
                        /sbin/sh
                        LK 082587 -1 -1 -1
smap            6       mail            6       SMAP Daemon User
```

```
                        /var/spool/smap
                        /sbin/sh
                        LK 082587 -1 -1 -1
nuucp           9       nuucp           9       uucp Admin
                        /var/spool/uucppublic
                        /usr/lib/uucp/uucico
                        LK 082587 -1 -1 -1
listen          37      adm             4       Network Admin
                        /usr/net/nls
                        /sbin/sh
                        LK 000000 -1 -1 -1
lp              71      lp              8       Line Printer Admin
                        /usr/spool/lp
                        /sbin/sh
                        LK 082587 -1 -1 -1
oracle          100     dba             100     Oracle User
                        /u01/app/oracle/product/7.3.3
                        /usr/bin/csh
                        PS 040198 -1 -1 -1
web             1001    webusers        1001    Web user
                        /data/home/web
                        /bin/sh
                        PS 021398 -1 -1 -1
XXXXXXX2        1002    staff           10      Disabled - Ray Arriaza
                        /data/home/XXXXXXX2
                        /bin/false
                        LK 021298 -1 -1 -1
XXXXXXX3        1003    staff           10      Disabled - Bob Herrman
                        /data/home/XXXXXXX3
                        /bin/false
                        LK 112498 -1 -1 -1
XXXXXXX4        1004    staff           10      Disabled - Robert Armstrong
                        /data/home/XXXXXXX4
                        /bin/false
                        LK 022599 -1 -1 -1
XXXXXXX5        1005    staff           10      Disabled - Lance Kurisaki
                        /data/home/XXXXXXX5
                        /bin/false
                        LK 092999 -1 -1 -1
XXXXXXX6        1006    staff           10      Disabled - Anthony Van Damme
                        /data/home/XXXXXXX6
                        /bin/false
                        LK 011499 -1 -1 -1
XXXXXXX7        1007    staff           10      MaryAnn Van Damme
                        /data/home/XXXXXXX7
                        /usr/bin/csh
                        PS 021298 -1 -1 -1
XXXXX8          1008    webusers        1001    Rocky Weber
                        /data/home/asdfXXX1
                        /bin/csh
                        PS 110599 -1 -1 -1
XXXXXXX9        1009    staff           10      Andre Jackson
                        /data/home/XXXXXXX9
                        /usr/bin/csh
                        PS 022399 -1 -1 -1
XXXXXX11        1011    staff           10      Disabled - Todd Allaria
                        /data/home/XXXXXX11
```

```
                        /bin/false
                        LK 080698 -1 -1 -1
XXXXXX12        1012    staff           10      Sean Bridgewater
                        /data/home/XXXXXX12
                        /usr/bin/csh
                        PS 010899 -1 -1 -1
XXXXX13         1013    staff           10      Disabled - Richard Jensen
                        /data/home/XXXXX13
                        /bin/false
                        LK 032399 -1 -1 -1
XXXXXX14        1014    staff           10      Disabled - Jeff Thomas
                        /data/home/XXXXXX14
                        /bin/false
                        LK 081399 -1 -1 -1
XXXXXX15        1015    webusers        1001    Disabled - Teresa Mulvihill
                        /data/home/XXXXXX15
                        /bin/false
                        LK 092199 -1 -1 -1
XXXXX40         1016    staff           10      Mark Graves
                        /data/home/XXXXX40
                        /usr/bin/csh
                        PS 042800 -1 -1 -1
ftp             30000   ftp             30000   Anonymous FTP
                        /ftp/home/ftp/./
                        /bin/false
                        LK 083099 -1 -1 -1
XXXXX31         30001   ftp             30000   IP Team
                        /ftp01/home/XXXXX31/./distribution
                        /bin/false
                        PS 121799 -1 -1 -1
XXXXX32         30002   ftp             30000   Checkpoint
                        /ftp02/home/vendors/XXXXX32/./incoming
                        /bin/false
                        LK 110598 -1 -1 -1
XXX33           30003   ftp             30000   Axent
                        /ftp02/home/vendors/XXX33/./incoming
                        /bin/false
                        LK 110598 -1 -1 -1
X34             30004   ftp             30000   KLA Tencor
                        /ftp02/home/customers/X34/./incoming
                        /bin/false
                        LK 022399 -1 -1 -1
XXXX35          30005   ftp             30000   Alteon
                        /ftp02/home/vendors/XXXX35/./incoming
                        /bin/false
                        PS 040699 -1 -1 -1
XXXX36          30006   ftp             30000   Boeing
                        /ftp02/home/customers/XXXX36/./outgoing
                        /bin/false
                        PS 050699 -1 -1 -1
X37             30007   ftp             30000   Apt Search
                        /ftp02/home/customers/X37/./outgoing
                        /bin/false
                        PS 042999 -1 -1 -1
XXXXXX38        30008   ftp             30000   Princess Cruise
                        /ftp02/home/customers/XXXXXX38/./incoming
                        /bin/false
```

```
                        PS 090199 -1 -1 -1
internal        30009   ftp             30000
                        /ftp02/home/customers/internal/./incoming
                        /dev/null
                        PS 102400 -1 -1 -1
X41             30010   ftp             30000
                        /ftp02/home/customers/X41/./outgoing
                        /dev/null
                        PS 111400 -1 -1 -1
patches         30500   ftp             30000   Support
                        /ftp02/home/customers/patches/./distribution
                        /bin/false
                        PS 083099 -1 -1 -1
XXXXX40         30501   other           1
                        /home/XXXXX40
                        /bin/sh
                        PS 050500 -1 -1 -1
jpurvis         30502   sysadmin        14
                        /data/home/jpurvis
                        /bin/ksh
                        PS 102400 -1 -1 -1
nobody          60001   nobody          60001   Nobody
                        /
                        /sbin/sh
                        LK 082587 -1 -1 -1
noaccess        60002   noaccess        60002   No Access User
                        /
                        /sbin/sh
                        LK 082587 -1 -1 -1
nobody4         65534   nogroup         65534   SunOS 4.x Nobody
                        /
                        /sbin/sh
                        LK 082587 -1 -1 -1

# mount
/ on /dev/dsk/c0t0d0s0 read/write/setuid/largefiles on Tue Apr 25 21:44:28
2000
/usr on /dev/dsk/c0t0d0s6 read/write/setuid/largefiles on Tue Apr 25 21:44:28
2000
/proc on /proc read/write/setuid on Tue Apr 25 21:44:28 2000
/dev/fd on fd read/write/setuid on Tue Apr 25 21:44:28 2000
/var on /dev/dsk/c0t0d0s1 read/write/setuid/largefiles on Tue Apr 25 21:44:28
2000
/opt on /dev/dsk/c0t0d0s5 setuid/read/write/largefiles on Tue Apr 25 21:44:29
2000
/ftp02 on /dev/dsk/c0t1d0s6 setuid/read/write/largefiles on Tue Apr 25
21:44:29 2000
/ftp01 on /dev/dsk/c0t1d0s7 setuid/read/write/largefiles on Tue Apr 25
21:44:29 2000
/data on /dev/dsk/c0t2d0s7 setuid/read/write/largefiles on Tue Apr 25
21:44:29 2000
/tmp on swap read/write on Tue Apr 25 21:44:29 2000

# netstat

TCP
   Local Address        Remote Address    Swind Send-Q Rwind Recv-Q  State
```

```
-------------------- -------------------- ----- ------ ----- ------ -------
localhost.33287      localhost.32772      32768      0 32768      0
ESTABLISHED
localhost.32772      localhost.33287      32768      0 32768      0
ESTABLISHED
localhost.33290      localhost.33285      32768      0 32768      0
ESTABLISHED
localhost.33285      localhost.33290      32768      0 32768      0
ESTABLISHED
localhost.33293      localhost.33292      32768      0 32768      0
ESTABLISHED
localhost.33292      localhost.33293      32768      0 32768      0
ESTABLISHED
localhost.33296      localhost.33285      32768      0 32768      0
ESTABLISHED
localhost.33285      localhost.33296      32768      0 32768      0
ESTABLISHED
localhost.33299      localhost.33298      32768      0 32768      0
ESTABLISHED
localhost.33298      localhost.33299      32768      0 32768      0
ESTABLISHED
localhost.33302      localhost.33285      32768      0 32768      0
ESTABLISHED
localhost.33285      localhost.33302      32768      0 32768      0
ESTABLISHED
localhost.33305      localhost.33304      32768      0 32768      0
ESTABLISHED
localhost.33304      localhost.33305      32768      0 32768      0
ESTABLISHED
localhost.41708      localhost.33285      32768      0 32768      0
ESTABLISHED
localhost.33285      localhost.41708      32768      0 32768      0
ESTABLISHED
localhost.41711      localhost.41710      32768      0 32768      0
ESTABLISHED
localhost.41710      localhost.41711      32768      0 32768      0
ESTABLISHED
kumo.22              172.16.2.47.756      32120      0  8760      0
ESTABLISHED
Active UNIX domain sockets
Address  Type         Vnode     Conn  Local Addr      Remote Addr
6032f210 stream-ord       0        0
6032fe10 stream-ord 60057470        0 /tmp/.X11-unix/X0

# netstat -a

UDP
   Local Address         Remote Address     State
-------------------- -------------------- -------
      *.sunrpc                            Idle
      *.*                                 Unbound
      *.32771                             Idle
      *.177                               Idle
      *.syslog                            Idle
      *.*                                 Unbound

TCP
```

```
   Local Address         Remote Address    Swind Send-Q Rwind Recv-Q  State
-------------------- -------------------- ----- ------ ----- ------ -------
      *.*                  *.*                0      0     0      0 IDLE
      *.sunrpc             *.*                0      0     0      0 LISTEN
      *.*                  *.*                0      0     0      0 IDLE
      *.smtp               *.*                0      0     0      0 LISTEN
      *.fs                 *.*                0      0     0      0 LISTEN
      *.dtspc              *.*                0      0     0      0 LISTEN
      *.32772              *.*                0      0     0      0 LISTEN
      *.22                 *.*                0      0     0      0 LISTEN
      *.32773              *.*                0      0     0      0 LISTEN
      *.80                 *.*                0      0     0      0 LISTEN
      *.6000               *.*                0      0     0      0 LISTEN
      *.33285              *.*                0      0     0      0 LISTEN
localhost.33287      localhost.32772      32768      0 32768      0
ESTABLISHED
localhost.32772      localhost.33287      32768      0 32768      0
ESTABLISHED
localhost.33290      localhost.33285      32768      0 32768      0
ESTABLISHED
localhost.33285      localhost.33290      32768      0 32768      0
ESTABLISHED
localhost.33293      localhost.33292      32768      0 32768      0
ESTABLISHED
localhost.33292      localhost.33293      32768      0 32768      0
ESTABLISHED
localhost.33296      localhost.33285      32768      0 32768      0
ESTABLISHED
localhost.33285      localhost.33296      32768      0 32768      0
ESTABLISHED
localhost.33299      localhost.33298      32768      0 32768      0
ESTABLISHED
localhost.33298      localhost.33299      32768      0 32768      0
ESTABLISHED
localhost.33302      localhost.33285      32768      0 32768      0
ESTABLISHED
localhost.33285      localhost.33302      32768      0 32768      0
ESTABLISHED
localhost.33305      localhost.33304      32768      0 32768      0
ESTABLISHED
localhost.33304      localhost.33305      32768      0 32768      0
ESTABLISHED
      *.ftp                *.*                0      0     0      0 LISTEN
      *.33313              *.*                0      0     0      0 LISTEN
localhost.41708      localhost.33285      32768      0 32768      0
ESTABLISHED
localhost.33285      localhost.41708      32768      0 32768      0
ESTABLISHED
localhost.41711      localhost.41710      32768      0 32768      0
ESTABLISHED
localhost.41710      localhost.41711      32768      0 32768      0
ESTABLISHED
kumo.ftp             172.16.2.47.59512        0      0  8855      0 LISTEN
kumo.22              172.16.2.47.756      32120      0  8760      0
ESTABLISHED
      *.*                  *.*                0      0     0      0 IDLE
Active UNIX domain sockets
```

```
Address  Type          Vnode     Conn  Local Addr      Remote Addr
6032f210 stream-ord        0        0
6032fe10 stream-ord 60057470        0 /tmp/.X11-unix/X0

# netstat -i
Name  Mtu  Net/Dest      Address        Ipkts  Ierrs Opkts  Oerrs Collis
Queue
lo0   8232 loopback      localhost      71164  0     71164  0     0      0
le0   1500 kumo          kumo           316698 0     313156 1     619    0

# netstat -l
usage: netstat [ -adgimnprsDMv ] [-I interface] [interval] [system] [core]

# netstat -p
Net to Media Table
Device   IP Address               Mask      Flags   Phys Addr
------ -------------------- --------------- ----- ---------------
le0    kuko-dmz             255.255.255.255       08:00:20:9a:25:78
le0    172.16.2.47          255.255.255.255       00:10:a4:ed:86:f4
le0    kumo                 255.255.255.255 SP    08:00:20:7c:50:84
le0    BASE-ADDRESS.MCAST.NET 240.0.0.0       SM    01:00:5e:00:00:00

# netstat -rn

Routing Table:
  Destination           Gateway           Flags  Ref   Use   Interface
-------------------- -------------------- ----- ----- ------ ---------
172.16.2.0           172.16.2.1           U         3   5163  le0
224.0.0.0            172.16.2.1           U         3      0  le0
default              172.16.2.254         UG        0  51268
127.0.0.1            127.0.0.1            UH        0  71131  lo0

# ps -elf
 F S      UID   PID  PPID  C PRI NI     ADDR     SZ    WCHAN    STIME TTY
TIME CMD
19 T     root     0     0  0   0 SY 10416f88      0           Apr 25 ?
0:00 sched
 8 S     root     1     0  0  41 20 60333608    165 60333800   Apr 25 ?
0:03 /etc/init -
19 S     root     2     0  0   0 SY 60332f48      0 10432c34   Apr 25 ?
0:00 pageout
19 S     root     3     0  0   0 SY 60332888      0 10435cdc   Apr 25 ?
176:28 fsflush
 8 S     root   196     1  0  41 20 60331448    184 60029c78   Apr 25 ?
0:00 /usr/lib/saf/sac -t 300
 8 S     root   172     1  0  41 20 603306c8    281 600a4d46   Apr 25 ?
0:01 /usr/sbin/vold
 8 S     root  9967     1  0  61 20 60331b08    192 600a5a16   Aug 18 console
0:00 /usr/lib/saf/ttymon -g -h -p kumo c
 8 S     root   107     1  0  41 20 604761d0    236 600a5016   Apr 25 ?
0:01 /usr/sbin/rpcbind
 8 S     root   157     1  0  41 20 60476f50    299 60477148   Apr 25 ?
0:32 /usr/sbin/nscd
 8 S     smap   163     1  0  41 20 60330008    188 60330200   Apr 25 ?
0:00 /usr/local/etc/smapd
 8 S     root   151     1  0  51 20 60477610    189 60029eb8   Apr 25 ?
0:12 /usr/sbin/cron
```

```
 8 S     root   137     1  0  41 20 60476890    400 60476f38   Apr 25 ?
0:03 /usr/sbin/syslogd -n -z 14
 8 S     root   109     1  0  89 20 60330d88    248 600a5066   Apr 25 ?
0:00 /usr/sbin/keyserv
 8 S     root   134     1  0  41 20 603321c8    218 600a4ed6   Apr 25 ?
0:00 /usr/sbin/inetd -s
 8 S     root  3368  3323  0  40 20 6060a8a0    622 600a41b6   Oct 24 pts/2
0:00 [ sdt_shel ]
 8 S     root   170     1  0  40 20 60475450    112 600a4e36   Apr 25 ?
0:00 /usr/lib/utmpd
 8 S     root  3385     1  0  40 20 605a8898    504 600a42a6   Oct 24 pts/2
0:26 /usr/dt/bin/ttsession
 8 S     root  3408  3405  0  40 20 60609b20    849 60354d38   Oct 24 pts/2
0:00 dtfile -noview
 8 S     root  3394     1  0  79 20 60660f68    200 60660fd8   Oct 24 ?
0:00 /bin/ksh /usr/dt/bin/sdtvolcheck -d
 8 S     root   183     1  0  51 20 605a9618    212 600a508e   Apr 25 ?
2:19 /usr/local/sbin/sshd
 8 S     root   189     1  0  51 20 605a8f58    724 600a4936   Apr 25 ?
0:00 /usr/dt/bin/dtlogin -daemon
 8 S     root  3404  3385  0  47 20 6065f468    113 6065f4d8   Oct 24 pts/2
0:00 /bin/sh -c dtfile -noview
 8 S     root   193     1  0  40 20 605a7b18    370 605a7d10   Apr 25 ?
0:01 /usr/local/etc/httpd/bin/httpd -f /
 8 S     root   200   196  0  41 20 605a7458    193 605a7650   Apr 25 ?
0:00 /usr/lib/saf/ttymon
 8 S     root 25931   183  4  41 20 6085edc8    222 604bec2e 15:43:11 ?
0:02 /usr/local/sbin/sshd
 8 S     root  3333  3323  0  40 20 60661628    245 600a4666   Oct 24 ?
0:00 /usr/openwin/bin/fbconsole
 8 S     root  3386  3371  0  50 20 6065eda8    772 600a4706   Oct 24 pts/2
0:12 /usr/dt/bin/dtsession
 8 S     root  9972     1  0  40 20 604746d0    245 600a4346   Aug 18 ?
0:00 /usr/openwin/bin/fbconsole -d :0
 8 S      web 17661   193  0  41 20 60609460    377 6072bdec   Nov 07 ?
0:00 /usr/local/etc/httpd/bin/httpd -f /
 8 S     root  3371  3368  0  43 20 605a81d8     36 605a8248   Oct 24 pts/2
0:00 [ sh ]
 8 S     root  9969   189  0  40 20 60474d90   2062 600a41de   Aug 18 ?
0:57 /usr/openwin/bin/Xsun :0 -nobanner
 8 R     root 25940 25934  0  78 20 6060a1e0     36          15:43:32 pts/3
0:00 -sh
 8 S     root  3392  3386  0  40 20 606086e0    865 600a4616   Oct 24 ?
0:01 dtwm
 8 S     root  9970   189  0  64 20 60608da0    736 60608e10   Aug 18 ?
0:00 /usr/dt/bin/dtlogin -daemon
 8 S      web 18600   193  0  41 20 6085a040    374 604bf03e   Nov 08 ?
0:00 /usr/local/etc/httpd/bin/httpd -f /
 8 S      web 17675   193  0  41 20 60861648    377 601b7e8c   Nov 07 ?
0:00 /usr/local/etc/httpd/bin/httpd -f /
 8 S     root  3403  3394  0  69 20 60608020    102 60029138   Oct 24 ?
0:00 /bin/cat /tmp/.removable/notify0
 8 S     root  3405  3404  0  50 20 6060b620    854 600a5796   Oct 24 pts/2
0:05 dtfile -noview
 8 S     root  3370     1  0  40 20 60475b10    246 600a4206   Oct 24 ?
0:00 /usr/dt/bin/dsdm
```

```
 8 S     root  3323  9970  0  40 20 605a6018    202 605a6088   Oct 24 ?
0:00 /bin/ksh /usr/dt/bin/Xsession
 8 S     root  3620   134  0  51 20 606601e8    348 604bffde   May 05 ?
0:00 /usr/dt/bin/rpc.ttdbserverd
 8 S      web 18597   193  0  41 20 6085bb40    376 601bb20c   Nov 08 ?
0:00 /usr/local/etc/httpd/bin/httpd -f /
 8 S      web 18598   193  0  41 20 606608a8    377 601ba76c   Nov 08 ?
0:00 /usr/local/etc/httpd/bin/httpd -f /
 8 S      web 19195   193  0  41 20 6085c8c0    375 6072bf2c   Nov 09 ?
0:00 /usr/local/etc/httpd/bin/httpd -f /
 8 S     root  3337     1  0  40 10 60474010    503 600a42f6   Oct 24 ?
0:00 /usr/openwin/bin/speckeysd
 8 S     root  8744  3386  0  51 20 6085c200    335 604bedbe   Oct 27 ?
0:00 /usr/dt/bin/dtexec -open 0 -ttproci
 8 S      web 18601   193  0  41 20 6065e6e8    375 6072be8c   Nov 08 ?
0:00 /usr/local/etc/httpd/bin/httpd -f /
 8 S      web 17677   193  0  41 20 6060af60    377 601ba6cc   Nov 07 ?
0:00 /usr/local/etc/httpd/bin/httpd -f /
 8 S      web 18599   193  0  41 20 605a66d8    376 600b43ac   Nov 08 ?
0:00 /usr/local/etc/httpd/bin/httpd -f /
 8 S      web 17676   193  0  41 20 608608c8    375 601ba4ec   Nov 07 ?
0:00 /usr/local/etc/httpd/bin/httpd -f /
 8 S  jpurvis 25934 25931  0  51 20 6065fb28    199 6065fb98 15:43:12 pts/3
0:00 -ksh
 8 S   nobody 17669   134  0  40 20 6085cf80    344 600a495e   Nov 07 ?
0:00 fs
 8 S     root  8745  8744  0  80 30 60860f88    629 600a42ce   Oct 27 ?
0:00 /usr/dt/bin/dtscreen -mode blank
 8 O     root 25963 25940  1  78 20 6085a700    106          15:43:49 pts/3
0:00 ps -elf

# rpcinfo -p
   program vers proto   port  service
    100000    4   tcp    111  rpcbind
    100000    3   tcp    111  rpcbind
    100000    2   tcp    111  rpcbind
    100000    4   udp    111  rpcbind
    100000    3   udp    111  rpcbind
    100000    2   udp    111  rpcbind
    100083    1   tcp  32772
1342177279    4   tcp  33285
1342177279    1   tcp  33285
1342177279    3   tcp  33285
1342177279    2   tcp  33285
    100221    1   tcp  33313

# showrev -a
Hostname: kumo
Hostid: 807c5084
Release: 5.6
Kernel architecture: sun4u
Application architecture: sparc
Hardware provider: Sun_Microsystems
Domain:
Kernel version: SunOS 5.6 Generic August 1997

OpenWindows version:
```

```
OpenWindows Version 3.6  7 July 1997
No patches are installed

# dmesg

Nov 17 15:46
cpu0: SUNW,UltraSPARC (upaid 0 impl 0x10 ver 0x22 clock 143 MHz)
SunOS Release 5.6 Version Generic [UNIX(R) System V Release 4.0]
Copyright (c) 1983-1997, Sun Microsystems, Inc.
mem = 65536K (0x4000000)
avail mem = 60874752
Ethernet address = 8:0:20:7c:50:84
root nexus = Sun Ultra 1 SBus (UltraSPARC 143MHz)
sbus0 at root: UPA 0x1f 0x0 ...
espdma0 at sbus0: SBus0 slot 0xe offset 0x8400000
esp0:   esp-options=0x46

esp0 at espdma0: SBus0 slot 0xe offset 0x8800000 Onboard device sparc9 ipl 4
sd0 at esp0: target 0 lun 0
sd0 is /sbus@1f,0/espdma@e,8400000/esp@e,8800000/sd@0,0
        <SUN2.1G cyl 2733 alt 2 hd 19 sec 80>
sd1 at esp0: target 1 lun 0
sd1 is /sbus@1f,0/espdma@e,8400000/esp@e,8800000/sd@1,0
        <SUN2.1G cyl 2733 alt 2 hd 19 sec 80>
sd2 at esp0: target 2 lun 0
sd2 is /sbus@1f,0/espdma@e,8400000/esp@e,8800000/sd@2,0
        <SUN2.1G cyl 2733 alt 2 hd 19 sec 80>
sd6 at esp0: target 6 lun 0
sd6 is /sbus@1f,0/espdma@e,8400000/esp@e,8800000/sd@6,0
root on /sbus@1f,0/espdma@e,8400000/esp@e,8800000/sd@0,0:a fstype ufs
zs0 at sbus0: SBus0 slot 0xf offset 0x1100000 Onboard device sparc9 ipl 12
zs0 is /sbus@1f,0/zs@f,1100000
zs1 at sbus0: SBus0 slot 0xf offset 0x1000000 Onboard device sparc9 ipl 12
zs1 is /sbus@1f,0/zs@f,1000000
keyboard is </sbus@1f,0/zs@f,1000000> major <29> minor <2>
mouse is </sbus@1f,0/zs@f,1000000:b> major <29> minor <3>
stdin is </sbus@1f,0/zs@f,1000000> major <29> minor <2>
cgsix0 at sbus0: SBus0 slot 0x2 offset 0x0 SBus level 5 sparc9 ipl 9
cgsix0 is /sbus@1f,0/cgsix@2,0
cgsix0: screen 1152x900, double buffered, 4M mappable, rev 11
stdout is </sbus@1f,0/cgsix@2,0> major <39> minor <0>
ledma0 at sbus0: SBus0 slot 0xe offset 0x8400010
le0 at ledma0: SBus0 slot 0xe offset 0x8c00000 Onboard device sparc9 ipl 6
le0 is /sbus@1f,0/ledma@e,8400010/le@e,8c00000
dump on /dev/dsk/c0t0d0s3 size 262176K

# cat /.dtprofile
#######################################################################
###
###   .dtprofile
###
###   user personal environment variables
###
###   Common Desktop Environment (CDE)
###
###   (c) Copyright 1993-1997 Sun Microsystems, Inc.
###   (c) Copyright 1993,1994 Hewlett-Packard Company
```

```
###   (c) Copyright 1993,1994 International Business Machines Corp.
###   (c) Copyright 1993,1994 Novell, Inc.
###
###
###   @(#)dtprofile.src 1.10 97/05/20
###
#############################################################################


#############################################################################
###
###   Your $HOME/.dtprofile is read each time you login to the Common Desktop
###   Environment (CDE) and is the place to set or override desktop
###   environment variables for your session. Environment variables set in
###   $HOME/.dtprofile are made available to all applications on the desktop.
###   The desktop will accept either sh or ksh syntax for the commands in
###   $HOME/.dtprofile.
###
#############################################################################


#############################################################################
###
###   Random stdout and stderr output from the desktop Session Mgr can be
###   directed into user's $HOME/.dt/sessionlogs directory.  By default this
###   output is not recorded.  Instead it is sent off to /dev/null (Unix's
###   "nothing" device).
###
###   If this random dtsession output is wanted (usually only wanted for
###   debugging purposes), commenting out following "dtstart_sessionlogfile"
###   lines will send output to your $HOME/.dt/sessionlogs directory.
###
###   Alternatively, can change "/dev/null" to "/dev/console" to see this
###   debugging output on your console device.  Can start a console via the
###   Workspace programs menu or via Application Mgr's Desktop Tools
###   "Terminal Console" icon.
###
#############################################################################

echo "This session log file is currently disabled."    >
$dtstart_sessionlogfile
echo "To enable logging, edit $HOME/.dtprofile and" >>
$dtstart_sessionlogfile
echo "remove dtstart_sessionlogfile=/dev/null line."  >>
$dtstart_sessionlogfile

export dtstart_sessionlogfile="/dev/null"


#############################################################################
###
###   By default, the desktop will read your standard $HOME/.profile
###   or $HOME/.login files. This can be changed commenting out the
###   DTSOURCEPROFILE variable assignment at the end of this file. The
###   desktop reads .profile if your $SHELL is "sh" or "ksh", or .login
###   if your $SHELL is "csh".
###
```

```
###   The desktop reads the .dtprofile and .profile/.login with a simulated
###   terminal via the sdt_shell program.  The sdt_shell program will create
###   a controlling terminal.  Shell output will be logged to the location
###   $HOME/.dt/startlog.  Any shell requested input will receive an end
###   of file character (Control-D).
###
###   This being the case .profile/.login should avoid requiring interaction
###   with the user at login time. Any messages printed in these scripts will
###   not be seen when you log in and any prompts such as by the "read"
###   command will return an end-of-file to the calling script.
###
###   With minor editing, it is possible to adapt your .profile or .login
###   for use both with and without the desktop.  Group user interaction
###   statements not appropriate for your desktop session into one section
###   and enclose them with an "if" statement that checks for absence of
###   of the "DT" environment variable. When the desktop reads your .profile
###   or .login file, it will set "DT" to a non-empty value for which your
###   .profile or .login can test.
###
###   example for sh/ksh
###
###     if [ ! "$DT" ]; then
###       #
###       # commands and environment variables not appropriate for desktop
###       #
###        echo "Please enter some data:"
###       read data
###        ...
###     fi
###
###     #
###     # environment variables common to both desktop and non-desktop
###     #
###     PATH=$HOME/bin:$PATH
###     MYVAR=value
###     export MYVAR
###     ...
###
###   example for csh
###
###     if ( ! ${?DT} ) then
###       #
###       # commands and environment variables not appropriate for desktop
###       #
###        echo "Please enter some data:"
###       read data
###       ...
###     endif
###
###     #
###     # environment variables common to both desktop and non-desktop
###     #
###     setenv PATH $HOME/bin:$PATH
###     setenv MYVAR value
###     ...
###
```

```
###   Errors in .dtprofile/.profile/.login are logged to
"$HOME/.dt/startlog".
###   If after you login, an environment they should have set and exported is
###   not present and this $HOME/.dtprofile file has set
"DTSOURCEPROFILE=true"
###   check $HOME/.dt/startlog for possible .profile/.login script error
###   output.
###
#########################################################################
#

DTSOURCEPROFILE=true

# cat /.login
# @(#)local.login 1.3     93/09/15 SMI
stty -istrip
# setenv TERM `tset -Q -`

# cat /.profile
#
# @(#)local.profile 1.4 93/09/15 SMI
#
umask 077
stty istrip
PATH=/usr/local/bin:/bin:/usr/bin:/usr/sbin:/usr/ucb:/etc
export PATH


# cat /data/home/XXXXXXX3/.login
# @(#)local.login 1.3     93/09/15 SMI
stty -istrip
# setenv TERM `tset -Q -`

# cat /data/home/XXXXXXX3/.profile
#
# @(#)local.profile 1.4 93/09/15 SMI
#
umask 077
stty istrip
PATH=/usr/local/bin:/bin:/usr/bin:/usr/sbin:/usr/ucb:/etc:/usr/ccs/bin:.
export PATH

# cat /data/home/asdfXXX1/.login
# @(#)local.login 1.3     93/09/15 SMI
stty -istrip
# setenv TERM `tset -Q -`


# cat /data/home/XXXXX32/etc/group
root::0:root
other::1:
bin::2:root,bin,daemon
sys::3:root,bin,sys,adm
adm::4:root,adm,daemon
uucp::5:root,uucp
mail::6:root
tty::7:root,tty,adm
```

```
lp::8:root,lp,adm
nuucp::9:root,nuucp
staff::10:
daemon::12:root,daemon
sysadmin::14:
nobody::60001:
noaccess::60002:
nogroup::65534:
ftp::30000:ftp

# cat /data/home/XXXXXXX6/.shosts
192.168.61.1 web

# cat /data/home/XXXXXXX6/.ssh/known_hosts
10k.singingbeagle.org 1024 35
132755395670915275881624704261717097996102330924562823013736143564896495597101
265303197314815974170691188495980006869783840822870382042199521327248739401 6
576392923240641693013511405858728537268248394546405326911211090991210791520 17
716896598169157344210990305366656961894675305739540703119776164289381677473061
192.168.84.195 1024 33
112267619318687474811721883235186580356615107281646662736707870816614443193251
638531088827509229012516898208722491175533693384353290923326051586506889175501
279112943989731100038043894829721012556361644387547296019982075081083063927191
690552957357922464737677748991504009326738741390294289939022221647390791630027

# cat /data/home/XXXXXXX6/known_hosts
cerberus.XXX.XXX 1024 37
160496398263438815992604856538171189758692893966178286454221164355772382057851
242856326259668974550976703151474402694484908905805303379286591972875106635861
168364357561329977842027825908168988262319409372365169480839148309360773589651
332750680862924440410148667368244313441723454079987367824060992483661298638561
192.168.51.4 1024 35
138142414583816555688899476541875111583165613692235913868743134074207965915831
405979736587908942508098518452134323509545164512019643908305968472119630397531
193496175384853229057080253162019705279499373180081845391897714380507444338331
588283852208702617087359857577184918807477643947978788163443684891563829642607
192.168.84.66 1024 35
132755395670915275881624704261717097996102330924562823013736143564896495597101
265303197314815974170691188495980006869783840822870382042199521327248739401 6
576392923240641693013511405858728537268248394546405326911211090991210791520 17
716896598169157344210990305366656961894675305739540703119776164289381677473061
192.168.51.10 1024 35
150119731382113893947795434430251720236799449873736752807426380733952151607321
549760846962662441905492635254035624579369864651026352359525895976819204085 6
068508606080381321230810451424853285654371045405004231907895009680267607740247
788971060680237463948506603806820968572131567804380666092175888410754507715993

# cat /etc/cron.d/at.deny
daemon
bin
smtp
```

```
nuucp
listen
nobody
noaccess

# cat /etc/cron.d/cron.deny
daemon
bin
smtp
nuucp
listen
nobody
noaccess

# cat /etc/default/inetinit
# @(#)inetinit.dfl 1.2 97/05/08
#
# TCP_STRONG_ISS sets the TCP initial sequence number generation parameters.
# Set TCP_STRONG_ISS to be:
#       0 = Old-fashioned sequential initial sequence number generation.
#       1 = Improved sequential generation, with random variance in
increment.
#       2 = RFC 1948 sequence number generation, unique-per-connection-ID.
#
TCP_STRONG_ISS=1

# cat /etc/default/init
# @(#)init.dfl 1.2 92/11/26
#
# This file is /etc/default/init.  /etc/TIMEZONE is a symlink to this file.
# This file looks like a shell script, but it is not.  To maintain
# compatibility with old versions of /etc/TIMEZONE, some shell constructs
# (i.e., export commands) are allowed in this file, but are ignored.
#
# Lines of this file should be of the form VAR=value, where VAR is one of
# TZ, LANG, or any of the LC_* environment variables.
#
TZ=US/Pacific

# cat /etc/default/kbd
#pragma ident   "@(#)kbd.dfl    1.2     96/06/07 SMI"
#
# Copyright 1996, Sun Microsystems, Inc.
# All Rights Reserved.
#
# /etc/default/kbd
#
# kbd default settings processed via kbd(1).
#
# KEYBOARD_ABORT affects the default behavior of the keyboard abort
# sequence, see kbd(1) for details.  The default value is "enable".
# The optional value is "disable".  Any other value is ignored.
#
# KEYCLICK affects the default keyclick behavior. Possible values are
# 'on' and 'off'.  Any other value is ignored. The default behavior is
# to leave the current keyclick setting unchanged.
#
```

```
# Uncomment the following lines to change the default values.
#
#KEYBOARD_ABORT=enable
#KEYCLICK=off

# cat /etc/default/login
#ident  "@(#)login.dfl  1.8     96/10/18 SMI"   /* SVr4.0 1.1.1.1      */

# Set the TZ environment variable of the shell.
#
#TIMEZONE=EST5EDT

# ULIMIT sets the file size limit for the login.  Units are disk blocks.
# The default of zero means no limit.
#
#ULIMIT=0

# If CONSOLE is set, root can only login on that device.
# Comment this line out to allow remote login by root.
#
CONSOLE=/dev/console

# PASSREQ determines if login requires a password.
#
PASSREQ=YES

# ALTSHELL determines if the SHELL environment variable should be set
#
ALTSHELL=YES

# PATH sets the initial shell PATH variable
#
#PATH=/usr/bin:

# SUPATH sets the initial shell PATH variable for root
#
#SUPATH=/usr/sbin:/usr/bin

# TIMEOUT sets the number of seconds (between 0 and 900) to wait before
# abandoning a login session.
#
#TIMEOUT=300

# UMASK sets the initial shell file creation mode mask.  See umask(1).
#
#UMASK=022

# SYSLOG determines whether the syslog(3) LOG_AUTH facility should be used
# to log all root logins at level LOG_NOTICE and multiple failed login
# attempts at LOG_CRIT.
#
SYSLOG=YES

# cat /etc/default/passwd
#ident  "@(#)passwd.dfl 1.3     92/07/14 SMI"
MAXWEEKS=
MINWEEKS=
```

```
PASSLENGTH=6

# cat /etc/default/su
#ident  "@(#)su.dfl     1.6     93/08/14 SMI"   /* SVr4.0 1.2   */

# SULOG determines the location of the file used to log all su attempts
#
SULOG=/var/adm/sulog

# CONSOLE determines whether attempts to su to root should be logged
# to the named device
#
#CONSOLE=/dev/console

# PATH sets the initial shell PATH variable
#
#PATH=/usr/bin:

# SUPATH sets the initial shell PATH variable for root
#
#SUPATH=/usr/sbin:/usr/bin

# SYSLOG determines whether the syslog(3) LOG_AUTH facility should be used
# to log all su attempts.  LOG_NOTICE messages are generated for su's to
# root, LOG_INFO messages are generated for su's to other users, and LOG_CRIT
# messages are generated for failed su attempts.
#
SYSLOG=YES

# cat /etc/defaultrouter
#192.168.84.158
172.16.2.254

# cat /etc/dfs/dfstab

#       Place share(1M) commands here for automatic execution
#       on entering init state 3.
#
#       Issue the command '/etc/init.d/nfs.server start' to run the NFS
#       daemon processes and the share commands, after adding the very
#       first entry to this file.
#
#       share [-F fstype] [ -o options] [-d "<text>"] <pathname> [resource]
#       .e.g,
#       share  -F nfs  -o rw=engineering  -d "home dirs"  /export/home2

# cat /etc/ftpaccess
loginfails 2

guestgroup ftponly

noretrieve /etc/passwd /etc/group core

class   local   real,guest,anonymous *.domain 0.0.0.0
class   remote  real,guest,anonymous *

limit   local   100 Any                 /etc/msgs/msg.toomany
```

```
limit   remote  100 Any                 /etc/msgs/msg.toomany

readme  README*    login
readme  README*    cwd=*

message /welcome.msg            login
message .message                cwd=*

compress        no              local remote
tar             no              local remote

# allow use of private file for SITE GROUP and SITE GPASS?
private         yes

# passwd-check  <none|trivial|rfc822>  [<enforce|warn>]
passwd-check    rfc822  warn

log commands  anonymous,guest
log transfers anonymous,guest,real inbound,outbound

shutdown /etc/msgs/shutmsg

# all the following default to "yes" for everybody
delete          no      anonymous               # delete permission?
overwrite       no      anonymous               # overwrite permission?
rename          no      anonymous               # rename permission?
chmod           no      real,guest,anonymous    # chmod permission?
umask           no      real,guest,anonymous    # umask permission?

# specify the upload directory information
upload  /ftp/home/ftp  *            no
upload  /ftp/home/ftp  /incoming    yes     ftp    ftp  0666 dirs
upload  /ftp/home/ftp  /bin         no
upload  /ftp/home/ftp  /etc         no

# directory aliases...  [note, the ":" is not required]
alias   inc:    /incoming

# cdpath
cdpath  /incoming
cdpath  /pub
cdpath  /

# path-filter...
path-filter  anonymous  /etc/pathmsg  ^[-A-Za-z0-9_\.]*$  ^\.  ^-
path-filter  guest      /etc/pathmsg  ^[-A-Za-z0-9_\.]*$  ^\.  ^-

# specify which group of users will be treated as "guests".
guestgroup ftponly

email XXXXXX15@singingbeagle.org

# cat /etc/ftphosts
# Example host access file
#
# Everything after a '#' is treated as comment,
# empty lines are ignored
```

```
# cat /etc/group
root::0:root,XXXXX40
other::1:jpurvis
bin::2:root,bin,daemon
sys::3:root,bin,sys,adm
adm::4:root,adm,daemon
uucp::5:root,uucp
mail::6:root
tty::7:root,tty,adm
lp::8:root,lp,adm
nuucp::9:root,nuucp
staff::10:XXXXX8,XXXXXX11,jpurvis
daemon::12:root,daemon
sysadmin::14:
nobody::60001:
noaccess::60002:
nogroup::65534:
webusers::1001:web,XXXXXXX5,XXXXX8,XXXXXXX6,XXXXXX15
ftp::30000:ftp
ftponly::30001:ftp,XXXXX32,XXXXX31,XXX33,X34,XXXX35,XXXX36,X37,XXXXXX38,patch
es
dba::100:

# cat /etc/inet/hosts
#
# Internet host table
#
127.0.0.1       localhost
#192.168.84.129 kumo kumo.singingbeagle.org loghost
172.16.2.1      kumo    kumo.singingbeagle.org    loghost
#
#192.168.84.65  toomi
172.16.1.30     10k.singingbeagle.org
#192.168.84.66  10k.singingbeagle.org

#192.168.84.67  enchi-in
172.16.1.0      seki-int
#192.168.84.94  seki-int
#
172.16.2.254    kuko-dmz
#192.168.84.158 kuko-dmz
#
192.168.84.193  seki
192.168.84.194  enchi-out
192.168.84.200  prowler

# cat /etc/inet/inetd.conf
#
#ident  "@(#)inetd.conf 1.27    96/09/24 SMI"   /* SVr4.0 1.5   */
#
#
# Configuration file for inetd(1M).  See inetd.conf(4).
#
# To re-configure the running inetd process, edit this file, then
# send the inetd process a SIGHUP.
#
```

```
# Syntax for socket-based Internet services:
#  <service_name> <socket_type> <proto> <flags> <user> <server_pathname>
<args>
#
# Syntax for TLI-based Internet services:
#
#  <service_name> tli <proto> <flags> <user> <server_pathname> <args>
#
# Ftp and telnet are standard Internet services.
#
ftp     stream  tcp     nowait  root    /usr/sbin/in.ftpd     in.ftpd -l -a
#telnet stream  tcp     nowait  root    /usr/sbin/in.telnetd    in.telnetd
smtp    stream  tcp     nowait  root    /usr/local/etc/smap     smap
#
# Tnamed serves the obsolete IEN-116 name server protocol.
#
##name  dgram   udp     wait    root    /usr/sbin/in.tnamed     in.tnamed
#
# Shell, login, exec, comsat and talk are BSD protocols.
#
##shell stream  tcp     nowait  root    /usr/sbin/in.rshd       in.rshd
##login stream  tcp     nowait  root    /usr/sbin/in.rlogind    in.rlogind
##exec  stream  tcp     nowait  root    /usr/sbin/in.rexecd     in.rexecd
##comsat        dgram   udp     wait    root    /usr/sbin/in.comsat
in.comsat
##talk  dgram   udp     wait    root    /usr/sbin/in.talkd      in.talkd
#
# Must run as root (to read /etc/shadow); "-n" turns off logging in
utmp/wtmp.
#
##uucp  stream  tcp     nowait  root    /usr/sbin/in.uucpd      in.uucpd
#
# Tftp service is provided primarily for booting.  Most sites run this
# only on machines acting as "boot servers."
#
#tftp   dgram   udp     wait    root    /usr/sbin/in.tftpd      in.tftpd -s
/tftpboot
#
# Finger, systat and netstat give out user information which may be
# valuable to potential "system crackers."  Many sites choose to disable
# some or all of these services to improve security.
#
##finger        stream  tcp     nowait  nobody  /usr/sbin/in.fingerd
in.fingerd
#systat stream  tcp     nowait  root    /usr/bin/ps             ps -ef
#netstat        stream  tcp     nowait  root    /usr/bin/netstat
netstat -f inet
#
# Time service is used for clock synchronization.
#
##time  stream  tcp     nowait  root    internal
##time  dgram   udp     wait    root    internal
#
# Echo, discard, daytime, and chargen are used primarily for testing.
#
##echo  stream  tcp     nowait  root    internal
##echo  dgram   udp     wait    root    internal
```

```
##discard       stream  tcp     nowait  root    internal
##discard       dgram   udp     wait    root    internal
##daytime       stream  tcp     nowait  root    internal
##daytime       dgram   udp     wait    root    internal
##chargen       stream  tcp     nowait  root    internal
##chargen       dgram   udp     wait    root    internal
#
#
# RPC services syntax:
#  <rpc_prog>/<vers> <endpoint-type> rpc/<proto> <flags> <user> \
#  <pathname> <args>
#
# <endpoint-type> can be either "tli" or "stream" or "dgram".
# For "stream" and "dgram" assume that the endpoint is a socket descriptor.
# <proto> can be either a nettype or a netid or a "*". The value is
# first treated as a nettype. If it is not a valid nettype then it is
# treated as a netid. The "*" is a short-hand way of saying all the
# transports supported by this system, ie. it equates to the "visible"
# nettype. The syntax for <proto> is:
#       *|<nettype|netid>|<nettype|netid>{[,<nettype|netid>]}
# For example:
# dummy/1       tli     rpc/circuit_v,udp       wait    root    /tmp/test_svc
test_svc
#
# Solstice system and network administration class agent server
##100232/10     tli     rpc/udp wait root /usr/sbin/sadmind     sadmind
#
# Rquotad supports UFS disk quotas for NFS clients
#
##rquotad/1     tli     rpc/datagram_v  wait root /usr/lib/nfs/rquotad
rquotad
#
# The rusers service gives out user information.  Sites concerned
# with security may choose to disable it.
#
##rusersd/2-3   tli     rpc/datagram_v,circuit_v        wait root
/usr/lib/netsvc/rusers/rpc.rusersd    rpc.rusersd
#
# The spray server is used primarily for testing.
#
##sprayd/1      tli     rpc/datagram_v  wait root
/usr/lib/netsvc/spray/rpc.sprayd      rpc.sprayd
#
# The rwall server allows others to post messages to users on this machine.
#
##walld/1               tli     rpc/datagram_v  wait root
/usr/lib/netsvc/rwall/rpc.rwalld      rpc.rwalld
#
# Rstatd is used by programs such as perfmeter.
#
##rstatd/2-4    tli   rpc/datagram_v wait root
/usr/lib/netsvc/rstat/rpc.rstatd rpc.rstatd
#
# The rexd server provides only minimal authentication and is often not run
#
#rexd/1          tli  rpc/tcp wait root /usr/sbin/rpc.rexd     rpc.rexd
#
```

```
# rpc.cmsd is a data base daemon which manages calendar data backed
# by files in /var/spool/calendar
#
#
# Sun ToolTalk Database Server
#
#
# UFS-aware service daemon
#
#ufsd/1 tli     rpc/*   wait    root    /usr/lib/fs/ufs/ufsd    ufsd -p
#
# Sun KCMS Profile Server
#
100221/1        tli     rpc/tcp wait root /usr/openwin/bin/kcms_server
kcms_server
#
# Sun Font Server
#
fs              stream  tcp     wait nobody /usr/openwin/lib/fs.auto    fs
#
# CacheFS Daemon
#
##100235/1 tli rpc/tcp wait root /usr/lib/fs/cachefs/cachefsd cachefsd
#
# Kerbd Daemon
#
##kerbd/4         tli     rpc/ticlts      wait    root    /usr/sbin/kerbd
kerbd
#
# Print Protocol Adaptor - BSD listener
#
##printer               stream  tcp     nowait  root    /usr/lib/print/in.lpd
in.lpd
dtspc stream tcp nowait root /usr/dt/bin/dtspcd /usr/dt/bin/dtspcd
##xaudio   stream tcp   wait root /usr/openwin/bin/Xaserver Xaserver -noauth
-inetd
##100068/2-5 dgram rpc/udp wait root /usr/dt/bin/rpc.cmsd rpc.cmsd
100083/1 tli rpc/tcp wait root /usr/dt/bin/rpc.ttdbserverd
/usr/dt/bin/rpc.ttdbserverd

# cat /etc/inet/netmasks
#
# The netmasks file associates Internet Protocol (IP) address
# masks with IP network numbers.
#
#       network-number  netmask
#
# The term network-number refers to a number obtained from the Internet
Network
# Information Center.  Currently this number is restricted to being a class
# A, B, or C network number.  In the future we should be able to support
# arbitrary network numbers per the Classless Internet Domain Routing
# guidelines.
#
# Both the network-number and the netmasks are specified in
# "decimal dot" notation, e.g:
#
```

```
#               128.32.0.0 255.255.255.0
#
#192.168.84.0   255.255.255.224
172.16.2.0      255.255.255.0

# cat /etc/mail/aliases
#ident  "@(#)aliases    1.13    92/07/14 SMI"   /* SVr4.0 1.1   */

##
#  Aliases can have any mix of upper and lower case on the left-hand side,
#       but the right-hand side should be proper case (usually lower)
#
#       >>>>>>>>>>      The program "newaliases" will need to be run after
#       >> NOTE >>      this file is updated for any changes to
#       >>>>>>>>>>      show through to sendmail.
#
#       @(#)aliases 1.8 86/07/16 SMI
##

# Following alias is required by the mail protocol, RFC 822
# Set it to the address of a HUMAN who deals with this system's mail
problems.
Postmaster: root

# Alias for mailer daemon; returned messages from our MAILER-DAEMON
# should be routed to our local Postmaster.
MAILER-DAEMON: postmaster

# Aliases to handle mail to programs or files, eg news or vacation
# decode: "|/usr/bin/uudecode"
nobody: /dev/null

# Sample aliases:

# Alias for distribution list, members specified here:
#staff:wnj,mosher,sam,ecc,mckusick,sklower,olson,rwh@ernie

# Alias for distribution list, members specified elsewhere:
#keyboards: :include:/usr/jfarrell/keyboards.list

# Alias for a person, so they can receive mail by several names:
#epa:eric

# cat /etc/mnttab
/dev/dsk/c0t0d0s0       /       ufs     rw,suid,dev=800000,largefiles
956724268
/dev/dsk/c0t0d0s6       /usr    ufs     rw,suid,dev=800006,largefiles
956724268
/proc   /proc   proc    rw,suid,dev=2900000     956724268
fd      /dev/fd fd      rw,suid,dev=29c0000     956724268
/dev/dsk/c0t0d0s1       /var    ufs     rw,suid,dev=800001,largefiles
956724268
/dev/dsk/c0t0d0s5       /opt    ufs     suid,rw,largefiles,dev=800005
956724269
/dev/dsk/c0t1d0s6       /ftp02  ufs     suid,rw,largefiles,dev=80000e
956724269
```

```
/dev/dsk/c0t1d0s7       /ftp01  ufs     suid,rw,largefiles,dev=80000f
956724269
/dev/dsk/c0t2d0s7       /data   ufs     suid,rw,largefiles,dev=800017
956724269
swap    /tmp    tmpfs   dev=1   956724269
kumo:vold(pid172)       /vol    nfs     ignore,noquota,dev=2b00001
956724295

# cat /etc/motd
Sun Microsystems Inc.   SunOS 5.6       Generic August 1997

# cat /etc/nsswitch.conf
#
# /etc/nsswitch.files:
#
# An example file that could be copied over to /etc/nsswitch.conf; it
# does not use any naming service.
#
# "hosts:" and "services:" in this file are used only if the
# /etc/netconfig file has a "-" for nametoaddr_libs of "inet" transports.

passwd:     files
group:      files
hosts:      files dns
networks:   files
protocols:  files
rpc:        files
ethers:     files
netmasks:   files
bootparams: files
publickey:  files
# At present there isn't a 'files' backend for netgroup;  the system will
#   figure it out pretty quickly, and won't use netgroups at all.
netgroup:   files
automount:  files
aliases:    files
services:   files
sendmailvars:   files

# cat /etc/pam.conf
#ident  "@(#)pam.conf 1.19     95/11/30 SMI"
#
# PAM configuration
#
# Authentication management
#
login   auth required   /usr/lib/security/pam_unix.so.1
login   auth required   /usr/lib/security/pam_dial_auth.so.1
#
rlogin  auth sufficient /usr/lib/security/pam_rhosts_auth.so.1
rlogin  auth required   /usr/lib/security/pam_unix.so.1
#
dtlogin auth required   /usr/lib/security/pam_unix.so.1
#
rsh     auth required   /usr/lib/security/pam_rhosts_auth.so.1
other   auth required   /usr/lib/security/pam_unix.so.1
#
```

```
# Account management
#
login   account required        /usr/lib/security/pam_unix.so.1
dtlogin account required        /usr/lib/security/pam_unix.so.1
#
other   account required        /usr/lib/security/pam_unix.so.1
#
# Session management
#
other   session required        /usr/lib/security/pam_unix.so.1
#
# Password management
#
other   password required       /usr/lib/security/pam_unix.so.1

# cat /etc/passwd
root::0:1:Super-User:/:/sbin/sh
daemon:x:1:1::/:
bin:x:2:2::/usr/bin:
sys:x:3:3::/:
adm:x:4:4:Admin:/var/adm:
lp:x:71:8:Line Printer Admin:/usr/spool/lp:
smap:x:6:6:SMAP Daemon User:/var/spool/smap:
smtp:x:0:0:Mail Daemon User:/:
uucp:x:5:5:uucp Admin:/usr/lib/uucp:
nuucp:x:9:9:uucp Admin:/var/spool/uucppublic:/usr/lib/uucp/uucico
listen:x:37:4:Network Admin:/usr/net/nls:
nobody:x:60001:60001:Nobody:/:
noaccess:x:60002:60002:No Access User:/:
nobody4:x:65534:65534:SunOS 4.x Nobody:/:
oracle:x:100:100:Oracle User:/u01/app/oracle/product/7.3.3:/usr/bin/csh
web:x:1001:1001:Web user:/data/home/web:/bin/sh
XXXXXXX2:x:1002:10:Disabled - XXXX:/data/home/XXXXXXX2:/bin/false
XXXXXXX3:x:1003:10:Disabled - XXXX:/data/home/XXXXXXX3:/bin/false
XXXXXXX4:x:1004:10:Disabled - XXXX:/data/home/XXXXXXX4:/bin/false
XXXXXXX5:x:1005:10:Disabled - XXXX:/data/home/XXXXXXX5:/bin/false
XXXXXXX6:x:1006:10:Disabled - XXXX:/data/home/XXXXXXX6:/bin/false
XXXXXXX7:x:1007:10:XXXX:/data/home/XXXXXXX7:/usr/bin/csh
XXXXX8:x:1008:1001:XXXX:/data/home/asdfXXX1:/bin/csh
XXXXXXX9:x:1009:10:XXXX:/data/home/XXXXXXX9:/usr/bin/csh
XXXXXX11:x:1011:10:Disabled - XXXX:/data/home/XXXXXX11:/bin/false
XXXXXX12:x:1012:10:XXXX:/data/home/XXXXXX12:/usr/bin/csh
XXXXX13:x:1013:10:Disabled - XXXX:/data/home/XXXXX13:/bin/false
XXXXXX14:x:1014:10:Disabled - XXXX:/data/home/XXXXXX14:/bin/false
ftp:x:30000:30000:Anonymous FTP:/ftp/home/ftp/./:/bin/false
XXXXX31:x:30001:30000:XXXX:/ftp01/home/XXXXX31/./distribution:/bin/false
XXXXX32:x:30002:30000:XXXX:/ftp02/home/vendors/XXXXX32/./incoming:/bin/false
XXX33:x:30003:30000:XXXX:/ftp02/home/vendors/XXX33/./incoming:/bin/false
X34:x:30004:30000:XXXX:/ftp02/home/customers/X34/./incoming:/bin/false
XXXX35:x:30005:30000:Alteon:/ftp02/home/vendors/XXXX35/./incoming:/bin/false
XXXX36:x:30006:30000:Boeing:/ftp02/home/customers/XXXX36/./outgoing:/bin/fals
e
X37:x:30007:30000:XXXX:/ftp02/home/customers/X37/./outgoing:/bin/false
XXXXXX38:x:30008:30000:XXXX:/ftp02/home/customers/XXXXXX38/./incoming:/bin/fa
lse
patches:x:30500:30000:Support:/ftp02/home/customers/patches/./distribution:/b
in/false
```

```
XXXXXX15:x:1015:1001:Disabled - XXXX:/data/home/XXXXXX15:/bin/false
XXXXX40:x:1016:10:XXXX:/data/home/XXXXX40:/usr/bin/csh
XXXXX40:x:30501:1::/home/XXXXX40:/bin/sh
jpurvis:x:30502:14::/data/home/jpurvis:/bin/ksh
internal:x:30009:30000::/ftp02/home/customers/internal/./incoming:/dev/null
X41:x:30010:30000::/ftp02/home/customers/X41/./outgoing:/dev/null

# cat /etc/resolv.conf
domain XXX.XXX
nameserver 192.168.62.2
nameserver 192.168.62.11

# cat /etc/rpc
#ident  "@(#)rpc        1.11    95/07/14 SMI"   /* SVr4.0 1.2   */
#
#       rpc
#
rpcbind         100000  portmap sunrpc rpcbind
rstatd          100001  rstat rup perfmeter
rusersd         100002  rusers
nfs             100003  nfsprog
ypserv          100004  ypprog
mountd          100005  mount showmount
ypbind          100007
walld           100008  rwall shutdown
yppasswdd       100009  yppasswd
etherstatd      100010  etherstat
rquotad         100011  rquotaprog quota rquota
sprayd          100012  spray
3270_mapper     100013
rje_mapper      100014
selection_svc   100015  selnsvc
database_svc    100016
rexd            100017  rex
alis            100018
sched           100019
llockmgr        100020
nlockmgr        100021
x25.inr         100022
statmon         100023
status          100024
ypupdated       100028  ypupdate
keyserv         100029  keyserver
bootparam       100026
sunlink_mapper  100033
tfsd            100037
nsed            100038
nsemntd         100039
showfhd         100043  showfh
ioadmd          100055  rpc.ioadmd
NETlicense      100062
sunisamd        100065
debug_svc       100066  dbsrv
bugtraqd        100071
kerbd           100078
event           100101  na.event        # SunNet Manager
logger          100102  na.logger       # SunNet Manager
```

```
sync            100104  na.sync
hostperf        100107  na.hostperf
activity        100109  na.activity     # SunNet Manager
hostmem         100112  na.hostmem
sample          100113  na.sample
x25             100114  na.x25
ping            100115  na.ping
rpcnfs          100116  na.rpcnfs
hostif          100117  na.hostif
etherif         100118  na.etherif
iproutes        100120  na.iproutes
layers          100121  na.layers
snmp            100122  na.snmp snmp-cmc snmp-synoptics snmp-unisys snmp-utk
traffic         100123  na.traffic
nfs_acl         100227
sadmind         100232
nisd            100300  rpc.nisd
nispasswd       100303  rpc.nispasswdd
ufsd            100233  ufsd
pcnfsd          150001

# cat /etc/shadow
root:HYG9nQWtJnEDw:10931::::::
daemon:NP:6445::::::
bin:NP:6445::::::
sys:NP:6445::::::
adm:NP:6445::::::
lp:NP:6445::::::
smap:NP:6445::::::
smtp:NP:6445::::::
uucp:NP:6445::::::
nuucp:NP:6445::::::
listen:*LK*:::::::
nobody:NP:6445::::::
noaccess:NP:6445::::::
nobody4:NP:6445::::::
oracle:9HYdoknN7Qm6M:10317::::::
web:1kvYWejMEpt9E:10270::::::
XXXXXXX2:*LK*:10269::::::
XXXXXXX3:*LK*:10554::::::
XXXXXXX4:*LK*:10647::::::
XXXXXXX5:*LK*:10863::::::
XXXXXXX6:*LK*:10605::::::
XXXXXXX7:hGM12lHd6Xrec:10269::::::
XXXXX8:mklnKXczA7QvE:10900::::::
XXXXXXX9:CSsbIoaAtdPNs:10645::::::
XXXXXX11:*LK*:10444::::::
XXXXXX12:FmCFTMIy.6KB.:10599::::::
XXXXX13:*LK*:10673::::::
ftp:NP:10833::::::
XXXXX31:u7eqNokeHteUg:10942::::::
XXXXX32:*LK*:10535::::::
XXX33:*LK*:10535::::::
X34:*LK*:10645::::::
XXXX35:ySrf71BYBST0c:10687::::::
XXXX36:tJIpQM2WK4NIM:10717::::::
X37:gQaPh02A7ppOc:10710::::::
```

```
patches:u7eqNokeHteUg:10833::::::
XXXXXX14:*LK*:10816::::::
XXXXXX38:rYYl9HbnWuFh.:10835::::::
XXXXXX15:*LK*:10855::::::
XXXXX40:elASNDmu5tRcM:11075::::::
XXXXX40:8mqEBt/uy0Fzs:11082::::::
jpurvis:/wLYcqbzd7VG2:11254::::::
internal:L5W9mxQPNe5.k:11254::::::
X41:8KgpAGkUgfkQA:11275::::::

# cat /etc/skel/.profile
#       This is the default standard profile provided to a user.
#       They are expected to edit it to meet their own needs.

MAIL=/usr/mail/${LOGNAME:?}

# cat /etc/skel/local.profile
#
# @(#)local.profile 1.4 93/09/15 SMI
#
stty istrip
PATH=/usr/bin:/usr/ucb:/etc:.
export PATH

#
# If possible, start the windows system
#
if [ `tty` = "/dev/console" ] ; then
        if [ "$TERM" = "sun" -o "$TERM" = "AT386" ] ; then

                if [ ${OPENWINHOME:-""} = "" ] ; then
                        OPENWINHOME=/usr/openwin
                        export OPENWINHOME
                fi

                echo ""
                echo "Starting OpenWindows in 5 seconds (type Control-C to
interrupt)"
                sleep 5
                echo ""
                $OPENWINHOME/bin/openwin

                clear           # get rid of annoying cursor rectangle
                exit            # logout after leaving windows system

        fi
fi


# cat /etc/ssh_config
# This is ssh client systemwide configuration file.  This file provides
# defaults for users, and the values can be changed in per-user configuration
# files or on the command line.

# Configuration data is parsed as follows:
#  1. command line options
#  2. user-specific file
```

```
#  3. system-wide file
# Any configuration value is only changed the first time it is set.
# Thus, host-specific definitions should be at the beginning of the
# configuration file, and defaults at the end.

# Site-wide defaults for various options

# Host *
#   ForwardAgent yes
#   ForwardX11 yes
#   RhostsAuthentication yes
#   RhostsRSAAuthentication yes
#   RSAAuthentication yes
#   TISAuthentication no
#   PasswordAuthentication yes
#   FallBackToRsh yes
#   UseRsh no
#   BatchMode no
#   StrictHostKeyChecking no
#   IdentityFile ~/.ssh/identity
#   Port 22
#   Cipher idea
#   EscapeChar ~

# cat /etc/sshd_config
# This is ssh server systemwide configuration file.

Port 22
ListenAddress 0.0.0.0
HostKey /etc/ssh_host_key
RandomSeed /etc/ssh_random_seed
ServerKeyBits 768
LoginGraceTime 600
KeyRegenerationInterval 3600
PermitRootLogin no
IgnoreRhosts no
StrictModes yes
QuietMode no
X11Forwarding yes
X11DisplayOffset 10
FascistLogging no
PrintMotd yes
KeepAlive yes
SyslogFacility DAEMON
RhostsAuthentication no
RhostsRSAAuthentication yes
RSAAuthentication yes
PasswordAuthentication yes
PermitEmptyPasswords yes
UseLogin no
# PidFile /u/zappa/.ssh/pid
# AllowHosts *.our.com friend.other.com
# DenyHosts lowsecurity.theirs.com *.evil.org evil.org
# Umask 022
# SilentDeny on

# cat /etc/syslog.conf
```

```
#ident  "@(#)syslog.conf        1.4     96/10/11 SMI"   /* SunOS 5.0 */
#
# Copyright (c) 1991-1993, by Sun Microsystems, Inc.
#
# syslog configuration file.
#
# This file is processed by m4 so be careful to quote (`') names
# that match m4 reserved words.  Also, within ifdef's, arguments
# containing commas must be quoted.
#
*.err;kern.notice;auth.notice                   /dev/console
*.err;kern.debug;mail.crit                      /var/adm/messages

# added for wu-ftpd & sshd
daemon.info                                     /var/adm/messages

*.alert;kern.err;daemon.err                     operator
*.alert                                         root

*.emerg                                         *

# if a non-loghost machine chooses to have authentication messages
# sent to the loghost machine, un-comment out the following line:
auth.notice                     ifdef(`LOGHOST', /var/log/authlog, @loghost)

mail.debug                      ifdef(`LOGHOST', /var/log/syslog, @loghost)

#
# non-loghost machines will use the following lines to cause "user"
# log messages to be logged locally.
#
ifdef(`LOGHOST', ,
user.err                                        /dev/console
user.err                                        /var/adm/messages
user.alert                                      `root, operator'
user.emerg                                      *
)

# cat /ftp01/home/XXXXX31/etc/group
root::0:root
other::1:
bin::2:root,bin,daemon
sys::3:root,bin,sys,adm
adm::4:root,adm,daemon
uucp::5:root,uucp
mail::6:root
tty::7:root,tty,adm
lp::8:root,lp,adm
nuucp::9:root,nuucp
staff::10:
daemon::12:root,daemon
sysadmin::14:
nobody::60001:
noaccess::60002:
nogroup::65534:
ftp::30000:ftp
```

```
Script started on Fri Nov 17 18:17:20 2000
1000 [18:17:20 -!R!- kumo] ssh jpurvis@172.16.2.1
jpurvis@172.16.2.1's password:
Last login: Fri Nov 17 15:43:12 2000 from 172.16.2.47
Sun Microsystems Inc.   SunOS 5.6       Generic August 1997
Sun Microsystems Inc.   SunOS 5.6       Generic August 1997
kumo$ su -
Password:
Sun Microsystems Inc.   SunOS 5.6       Generic August 1997
You have mail.
# showrev -p
No patches are installed
# pkginfo
application FSFgzip        gzip
application NSCPnav        Netscape Navigator (export)
system      SUNWab2m       Solaris Documentation Server Lookup
system      SUNWaccr       System Accounting, (Root)
system      SUNWaccu       System Accounting, (Usr)
system      SUNWadmap      System administration applications
system      SUNWadmc       System administration core libraries
system      SUNWadmfw      System & Network Administration Framework
system      SUNWadmr       System & Network Administration Root
system      SUNWapppr      PPP/IP Asynchronous PPP daemon configuration files
system      SUNWapppu      PPP/IP Asynchronous PPP daemon and PPP login
service
system      SUNWarc        Archive Libraries
system      SUNWast        Automated Security Enhancement Tools
system      SUNWatfsr      AutoFS, (Root)
system      SUNWatfsu      AutoFS, (Usr)
system      SUNWaudio      Audio applications
system      SUNWaudmo      Audio demo programs
system      SUNWbcp        SunOS 4.x Binary Compatibility
system      SUNWbnur       Networking UUCP Utilities, (Root)
system      SUNWbnuu       Networking UUCP Utilities, (Usr)
system      SUNWbtool      CCS tools bundled with SunOS
system      SUNWcar        Core Architecture, (Root)
system      SUNWcg6        GX (cg6) Device Driver
system      SUNWcg6h       GX (cg6) Header Files
ALE         SUNWciu8       Chinese/PRC iconv modules for UTF-8
system      SUNWcpr        Suspend, Resume package
system      SUNWcsd        Core Solaris Devices
system      SUNWcsr        Core Solaris, (Root)
system      SUNWcsu        Core Solaris, (Usr)
system      SUNWdfb        Dumb Frame Buffer Device Drivers
system      SUNWdfbh       Dumb Frame Buffer Header Files
system      SUNWdhcsr      BOOTP/DHCP Server Services, (Root)
system      SUNWdhcsu      BOOTP/DHCP Server Services, (Usr)
system      SUNWdial       Buttons/Dials (bd) Streams Module
application SUNWdialh      Buttons/Dials (bd) Header Files
system      SUNWdoc        Documentation Tools
system      SUNWdtab       CDE DTBUILDER
system      SUNWdtbas      CDE application basic runtime environment
system      SUNWdtcor      Solaris Desktop /usr/dt filesystem anchor
system      SUNWdtdem      CDE DEMOS
system      SUNWdtdmn      CDE daemons
system      SUNWdtdst      CDE Desktop Applications
system      SUNWdtdte      Solaris Desktop Login Environment
```

```
system      SUNWdthe       CDE HELP RUNTIME
system      SUNWdthed      CDE HELP DEVELOPER ENVIRONMENT
system      SUNWdthev      CDE HELP VOLUMES
system      SUNWdthj       HotJava Browser for Solaris
system      SUNWdticn      CDE icons
system      SUNWdtim       Solaris CDE Image Viewer
system      SUNWdtinc      CDE Includes
system      SUNWdtlog      System boot for Desktop Login
system      SUNWdtma       CDE man pages
system      SUNWdtmad      CDE developer man pages
system      SUNWdtrme      CDE Release Documentation
system      SUNWdtwm       CDE DESKTOP WINDOW MANAGER
system      SUNWenise      Base Partial Locales
system      SUNWesu        Extended System Utilities
system      SUNWeudba      UTF-8 L10N for CDE Base
system      SUNWeudbd      UTF-8 L10N for CDE Dtbuilder
system      SUNWeudda      UTF-8 L10N For CDE Desktop Applications
system      SUNWeudhr      UTF-8 L10N For CDE Help Runtime
system      SUNWeudhs      UTF-8 L10N For CDE Help Runtime
system      SUNWeudis      UTF-8 L10N For CDE Icons
system      SUNWeudiv      UTF-8 L10N For Desktop Imagetool
system      SUNWeudlg      UTF-8 L10N For CDE Desktop Login
system      SUNWeudmg      UTF-8 L10N For Desktop Window Manager
system      SUNWeuise      European Partial Locales
system      SUNWeuluf      UTF-8 L10N For Language Environment User Files
system      SUNWeuodf      UTF-8 Core OPENLOOK Desktop Files
system      SUNWeuxwe      UTF-8 X Window Environment
system      SUNWfac        Framed Access Command Environment
system      SUNWfns        Federated Naming System
system      SUNWfnsx5      FNS Support For X.500 Directory Context
system      SUNWhea        SunOS Header Files
ALE         SUNWhiu8       Chinese/Taiwan iconv modules for UTF-8
system      SUNWhmd        SunSwift SBus Adapter Drivers
system      SUNWhmdu       SunSwift SBus Adapter Headers
system      SUNWi1of       ISO-8859-1 (Latin-1) Optional Fonts
system      SUNWi2of       X11 ISO-8859-2 optional fonts
system      SUNWi2rf       X11 ISO-8859-2 required fonts
system      SUNWi4of       X11 ISO-8859-4 optional fonts
system      SUNWi4rf       X11 ISO-8859-4 required fonts
system      SUNWi5of       X11 ISO-8859-5 optional fonts
system      SUNWi5rf       X11 ISO-8859-5 required fonts
system      SUNWi7of       X11 ISO-8859-7 optional fonts
system      SUNWi7rf       X11 ISO-8859-7 required fonts
system      SUNWi9of       X11 ISO-8859-9 optional fonts
system      SUNWi9rf       X11 ISO-8859-9 required fonts
system      SUNWinst       Install Software
system      SUNWipc        Interprocess Communications
system      SUNWislcc      XSH4 conversion for Eastern European locales
system      SUNWisolc      XSH4 conversion for ISO Latin character sets
system      SUNWjiu8       Japanese iconv modules for UTF-8
system      SUNWjvdem      JavaVM demo programs
system      SUNWjvdev      JavaVM developers packages, includes javac, javah,
and javap
system      SUNWjvjit      Java JIT compiler
system      SUNWjvman      JavaVM man pages
system      SUNWjvrt       JavaVM run time environment
application SUNWkcspf      KCMS Optional Profiles
```

```
application SUNWkcspg      KCMS Programmers Environment
application SUNWkcsrt      KCMS Runtime Environment
system      SUNWkey        Keyboard configuration tables
ALE         SUNWkiu8       Korean UTF-8 iconv modules for UTF-8
system      SUNWkvm        Core Architecture, (Kvm)
system      SUNWleo        ZX System Software (Device Driver)
application SUNWleoo       ZX XGL support
system      SUNWleor       ZX System Software (Root)
application SUNWleow       ZX Window System Support
system      SUNWlibC       SPARCompilers Bundled libC
system      SUNWlibCf      SunSoft WorkShop Bundled libC (cfront version)
system      SUNWlibm       Sun WorkShop Bundled libm
system      SUNWlibms      Sun WorkShop Bundled shared libm
system      SUNWloc        System Localization
system      SUNWlpmsg      LP Alerts
system      SUNWluxal      Sun Enterprise Network Array socal Device Driver
system      SUNWluxdv      Sun Enterprise Network Array sf Device Driver
system      SUNWluxop      Sun Enterprise Network Array firmware and
utilities
system      SUNWman        On-Line Manual Pages
system      SUNWmfdev      Motif UIL Compiler
system      SUNWmfman      CDE Motif Manuals
system      SUNWmfrun      Motif RunTime Kit
system      SUNWmibii      Solstice Enterprise Agent SNMP daemon
system      SUNWnisr       Network Information System, (Root)
system      SUNWnisu       Network Information System, (Usr)
system      SUNWntpr       NTP, (Root)
system      SUNWntpu       NTP, (Usr)
system      SUNWoladd      OPEN LOOK Alternate Desktop Demos
system      SUNWolaud      OPEN LOOK Audio applications
system      SUNWolbk       OpenWindows online handbooks
system      SUNWoldcv      OPEN LOOK document and help viewer applications
system      SUNWoldem      OPEN LOOK demo programs
system      SUNWoldim      OPEN LOOK demo images
system      SUNWoldst      OPEN LOOK deskset tools
system      SUNWoldte      OPEN LOOK Desktop Environment
system      SUNWolimt      OPEN LOOK imagetool
system      SUNWolinc      OPEN LOOK include files
system      SUNWolman      OPEN LOOK toolkit/desktop users man pages
system      SUNWolrte      OPEN LOOK toolkits runtime environment
system      SUNWolslb      OPEN LOOK toolkit/desktop static/lint libraries
system      SUNWolsrc      OPEN LOOK sample source
system      SUNWos86u      Platform Support, OS Functionality (Usr)
system      SUNWosdem      OS demo source
system      SUNWowbcp      OpenWindows binary compatibility
system      SUNWowrqd      OpenWindows required core package
system      SUNWpcelx      3COM EtherLink III PCMCIA Ethernet Driver
system      SUNWpcmci      PCMCIA Card Services, (Root)
system      SUNWpcmcu      PCMCIA Card Services, (Usr)
system      SUNWpcmem      PCMCIA memory card driver
system      SUNWpcr        SunSoft Print - Client, (root)
system      SUNWpcser      PCMCIA serial card driver
system      SUNWpcu        SunSoft Print - Client, (usr)
application SUNWpexcl      PEX Runtime Client Library
application SUNWpexh       PEX Client Developer Files
application SUNWpexsv      PEX Runtime Server Extension
system      SUNWpldte      Eastern European locale support
```

```
system      SUNWploc       Partial Locales
system      SUNWploc1      Supplementary Partial Locales
system      SUNWplow       OpenWindows enabling for Partial Locales
system      SUNWplow1      OpenWindows enabling for Supplementary Partial
Locales
system      SUNWpmowm      Power Management OW Utilities Man Pages
system      SUNWpmowr      Power Management OW Utilities, (Root)
system      SUNWpmowu      Power Management OW Utilities, (Usr)
system      SUNWpmr        Power Management config file and rc script
system      SUNWpmu        Power Management binaries
system      SUNWpppk       PPP/IP and IPdialup Device Drivers
system      SUNWpsdpr      PCMCIA ATA card driver
system      SUNWpsf        PostScript filters - (Usr)
system      SUNWpsr        SunSoft Print - LP Server, (root)
system      SUNWpsu        SunSoft Print - LP Server, (usr)
system      SUNWrdm        On-Line Open Issues ReadMe
system      SUNWrtvc       SunVideo Device Driver
application SUNWrtvcl      SunVideo XIL library support
application SUNWrtvcu      SunVideo Runtime Support Software
system      SUNWsacom      Solstice Enterprise Agent files for root file
system
system      SUNWsadmi      Solstice Enterprise Agent Desktop Management
Interface
system      SUNWsadml      Solstice Launcher.
system      SUNWsasnm      Solstice Enterprise Agent Simple Network
Management Protocol
system      SUNWscbcp      SPARCompilers Binary Compatibility Libraries
system      SUNWscplp      SunSoft Print - Source Compatibility, (Usr)
system      SUNWscpr       Source Compatibility, (Root)
system      SUNWscpu       Source Compatibility, (Usr)
system      SUNWses        SCSI Enclosure Services Device Driver
system      SUNWsolnm      Solaris Naming Enabler
system      SUNWspl        Spell Checking Engine - Base Release (English)
system      SUNWsprot      Solaris Bundled tools
system      SUNWsra        Source Compatibility Archive Libraries
system      SUNWsregu      Solaris User Registration
system      SUNWsrh        Source Compatibility Header Files
system      SUNWssadv      SPARCstorage Array Drivers
system      SUNWssaop      SPARCstorage Array Utility
system      SUNWsutl       Static Utilities
system      SUNWswmt       Patch Utilities
application SUNWsx         SX Shareable Library
application SUNWsxow       SX Window System Support
application SUNWsxxgl      SX XGL Support
application SUNWtcxow      TCX Window System Support
application SUNWtcxu       TCX XGL Support
system      SUNWter        Terminal Information
system      SUNWtltk       ToolTalk runtime
system      SUNWtltkd      ToolTalk developer support
system      SUNWtltkm      ToolTalk manual pages
system      SUNWtnfc       TNF Core Components
system      SUNWtnfd       TNF Developer Components
system      SUNWtoo        Programming Tools
system      SUNWuiu8       Iconv modules for UTF-8 Locale
system      SUNWuium       Iconv Man Pages for UTF-8 Locale
system      SUNWulcf       UTF-8 Locale Environment Common Files
system      SUNWuxlcf      UTF-8 X Locale Environment Common Files
```

```
system      SUNWvolg       Volume Management Graphical User Interface
system      SUNWvolr       Volume Management, (Root)
system      SUNWvolu       Volume Management, (Usr)
system      SUNWxcu4       XCU4 Utilities
system      SUNWxcu4t      XCU4 make and sccs utilities
application SUNWxgldg      XGL Generic Loadable Libraries
application SUNWxgler      XGL English Localization
application SUNWxglft      XGL Stroke Fonts
application SUNWxglh       XGL Include Files
application SUNWxglrt      XGL Runtime Environment
system      SUNWxi18n      X Window System I18N Common Package
application SUNWxilcg      CG14 XIL Support
application SUNWxildh      XIL Loadable Pipeline Libraries
application SUNWxilh       XIL API Header Files
application SUNWxilmn      XIL man pages and demos
application SUNWxilow      XIL Deskset Loadable Pipeline Libraries
application SUNWxilrl      XIL Runtime Environment
application SUNWxilvl      VIS/XIL Support
system      SUNWxim        X Window System X Input Method Server Package
system      SUNWxwacx      AccessX client program
system      SUNWxwcft      X Window System common (not required) fonts
system      SUNWxwdem      X Window System demo programs
system      SUNWxwdim      X Window System demo images
system      SUNWxwdv       X Windows System Window Drivers
system      SUNWxwdxm      DPS motif library
system      SUNWxwfa       X Window System Font Administrator
system      SUNWxwfnt      X Window System platform required fonts
system      SUNWxwfs       Font server
system      SUNWxwhl       X Window System & Graphics Header links in
/usr/include
system      SUNWxwice      ICE components
system      SUNWxwinc      X Window System include files
system      SUNWxwman      X Window System online user man pages
system      SUNWxwmod      OpenWindows kernel modules
system      SUNWxwoft      X Window System optional fonts
system      SUNWxwopt      nonessential MIT core clients and server
extensions
system      SUNWxwplt      X Window System platform software
system      SUNWxwpmn      X Window System online programmers man pages
system      SUNWxwpsr      Sun4u-platform specific X server auxiliary filter
modules
system      SUNWxwrtl      X Window System & Graphics Runtime Library Links
in /usr/lib
system      SUNWxwslb      X Window System static/lint libraries
system      SUNWxwsrc      X Window System sample source
system      SUNWypr        NIS Server for Solaris (root)
system      SUNWypu        NIS Server for Solaris (usr)
utility     md5sum         md5sum 1.00 SPARC Solaris 2.6
# ls -l /var/log/syslog
-rw-r--r--   1 root     other       6054 Nov 17 05:00 /var/log/syslog
# ls -l /var/adm/messages
-rw-r--r--   1 root     other       7809 Nov 17 16:44 /var/adm/messages
# ls -l /var/adm
total 6436
drwxrwxr-x   5 adm      adm          512 Jan 26  1998 acct
-rw-------   1 uucp     bin            0 Jan 26  1998 aculog
drwx------   2 root     other        512 May  5  2000 backup
```

```
-rw-r--r--   1 root     root        4096 Apr  2  1998 ftp.pids-all
-rw-r--r--   1 root     root        4096 Nov 17 16:31 ftp.pids-remote
drwxr-xr-x   2 root     other        512 Dec  1  1999 fw
-r--r--r--   1 root     root      854084 Nov 17 16:44 lastlog
drwxrwxr-x   2 adm      adm          512 Jan 26  1998 log
-rw-r--r--   1 root     other       7809 Nov 17 16:44 messages
-rw-r--r--   1 root     other       2638 Nov  7 14:58 messages.0
-rw-r--r--   1 root     other        525 Nov  4 23:50 messages.1
-rw-r--r--   1 root     other       2911 Oct 24 15:25 messages.2
-rw-r--r--   1 root     other          0 Oct 15 03:10 messages.3
-rw-r--r--   1 root     other          0 Oct  8 03:10 messages.4
-rw-r--r--   1 root     other          0 Oct  1 03:10 messages.5
-rw-------   1 root     other       1601 Dec 30  1999 nohup.out
drwxrwxr-x   2 adm      adm          512 Jan 26  1998 passwd
drwxrwxr-x   2 adm      sys          512 Jan 26  1998 sa
-rw-rw-rw-   1 bin      bin            0 Jan 26  1998 spellhist
-rw-------   1 root     root       17135 Nov 17 16:45 sulog
-rw-r--r--   1 root     bin          432 Nov 17 16:44 utmp
-rw-r--r--   1 root     bin         4464 Nov 17 16:44 utmpx
-rw-rw-rw-   1 root     root        3904 Apr 25  2000 vold.log
-rw-rw-r--   1 adm      adm       218016 Nov 17 16:44 wtmp
-rw-rw-r--   1 adm      adm      2252088 Nov 17 16:44 wtmpx
-rw-rw----   1 root     other     694845 Nov 14 15:57 xferlog
# exit
kumo$ exit
Connection to 172.16.2.1 closed.
1001 [18:21:24 -!R!- kumo]#
Script done on Fri Nov 17 18:21:25 2000
```

End Notes

[i] The "banner" on a service is the initial greeting string put out by the daemon when a client connects to it, either as a greeting message or in response to a client's request for the server's version information. Banners frequently include the name and version number of the software used, and may also include the architecture of the system they are employed upon, the current date and time according to the system, and so forth. Such information is of great use to an intruder, since it provides clues to what attacks will work against a host.

[ii] These switches were not utilized here, as no intrusion detection was in place on the internal network, and using them slows down the scan significantly.

[iii] Only includes stopping the old daemon and starting new, not compiling and testing new version

[iv] Only includes stopping the old daemon and starting new, not compiling and testing new version

[v] Only includes stopping the old daemon and starting new, not compiling and testing new version

[vi] Only includes stopping the old daemon and starting new, not compiling and testing new version

[vii] Time here has been reduced, since any competent tech writer will take less time to document a clean, secure new installation he/she can document as the installation proceeds than learn a currently-configured one and document it after the fact.