

NICHE DISTRO

Censornet 3.1

Customised Linux build for controlling Web access on your LAN/WAN

Pros: Easy to install, great web administration interface, based on solid open source foundations

Cons: Can be very fussy about supported hardware

Price: Basic software free under GPL, Blacklist updates £100 per year, Email/Online Support £350 per year

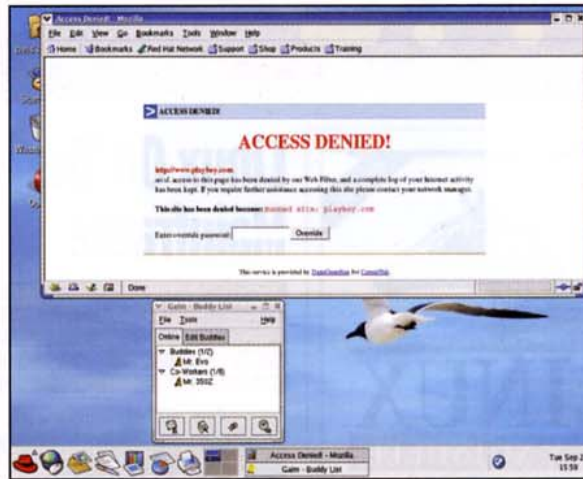


Whilst the Internet has become an essential part of many of our working lives, it can also offer certain temptations that are perhaps best left out of the office. Many employers are all too aware of this, and have concerns ranging from the amount of time their staff spend shopping around for cheap holidays, to (more seriously) those visiting pornographic and even illegal sites from within the company network. Other organisations, such as schools, also have a pressing need to restrict the more unsavoury cyberspace destinations.

To meet requirements like these, proprietary solutions such as Websense and Surf Control have emerged. These products tend to be aimed at the higher end of the market and can be prohibitively expensive. Censornet is their main open source competitor.

Created and maintained in the UK by Adelix, Censornet is, unlike its rivals, not an application but a complete Linux distribution constructed to serve a single purpose. Using Debian as a starting point, it delivers webpages to clients via a Squid proxy server and makes use of a combination of DansGuardian and the SquidGuard blacklist for URL filtering. Authentication with Windows NT and Active Directory domains is achieved by use of the Samba project's Winbind software. Usage statistics are provided by Webalizer and Calamaris, courtesy of Apache, which also powers the specially-written Web-based user interface.

Censornet's hardware requirements are modest. Two supported PCI network cards are obviously needed, because without these Censornet will be paralysed. Fortunately, a list of acceptable cards is provided on the



website and many are both cheap and readily available.

We tested Censornet on a Dell PowerEdge 2500 with dual Pentium III processors, 128Mb memory and four 36Gb SCSI disks. This might be viewed as overkill but if Censornet is to be considered for an Enterprise environment it has to run on the kind of hardware that such an environment demands. To try and head off unnecessary problems, two appropriate 3Com PCI network cards were inserted.

The installation is performed from bootable CD through a well-designed series of text-based screens. The hard disk that will host the operating system should be automatically detected early on, but only if it is attached to an IDE controller. Anything SCSI-based has to be added manually. In our case, the manual process repeatedly and frustratingly failed. Without any recognised hard disks, obviously the install did not get very far.

Although we had no formal support, a post on the Censornet forum elicited some extremely helpful tips and suggestions. Armed with this new knowledge it quickly became evident that the problem was the machine's built-in RAID controller. Some rewiring soon got the disks up and running, although in fact only one was actually necessary. Censornet is designed to use a single disk drive and without any form of hardware RAID support that was all we could use. Still, this did have the effect of simplifying the rest of the install process, which in truth required little further intervention and went remarkably smoothly.

Censornet really comes into its own when it comes down to configuration. The server-side elements of the configuration are accessed by entering a text-based setup utility which is

If you need to control which destinations employees or students are accessing, Censornet provides a complete solution which builds on free software technologies

perfectly easy to use. From here you perform tasks such as specifying the network settings and optionally importing users from a Windows domain. This latter step can be avoided as Censornet comes with its own LDAP-based authentication method. However, for integration into an existing network, it is a very useful feature. Censornet works with both NT4 domains and Active Directory and it can handle two domains at once, so it should be capable of dealing with most eventualities.

The attractive Web-based administration tool is used for most tasks relating to the Censornet service. For instance, user permissions and URL blacklists are defined from here. After you have imported users you can decide whether they should get full access to the Internet, filtered access or indeed no access at all. They can also be arranged in groups. Users can be added and deleted here too, which saves the need for constantly re-importing user lists once the initial work has been done.

Censornet comes with a pre-defined blacklist of URLs to be filtered, and this can be interrogated and amended as per your policies. Of course, many suspect websites change addresses all the time and to keep up the blacklist must be regularly updated. This process can be automated so that the SquidGuard lists are uploaded twice a week, although Adelix charge a modest fee for providing this feature.

The great thing about Censornet is that when it is installed and configured as per your requirements, it works perfectly. Furthermore, it is not really so very difficult to reach such a state. Adelix have done an excellent job of packaging established Linux ingredients in a fresh and profoundly useful way. They provide top-drawer documentation and plenty of free assistance by means of the forum. As a business they have to make money, but it is hard to begrudge any income they derive from support, consultancy or indeed the image filter functionality that does not form part of the GPL release.

Censornet is a relatively new product but is full of clever ideas. There is certainly work required to bring it up to a truly Enterprise level but this will no doubt come in time and when it does, Censornet could well become extremely big indeed.

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