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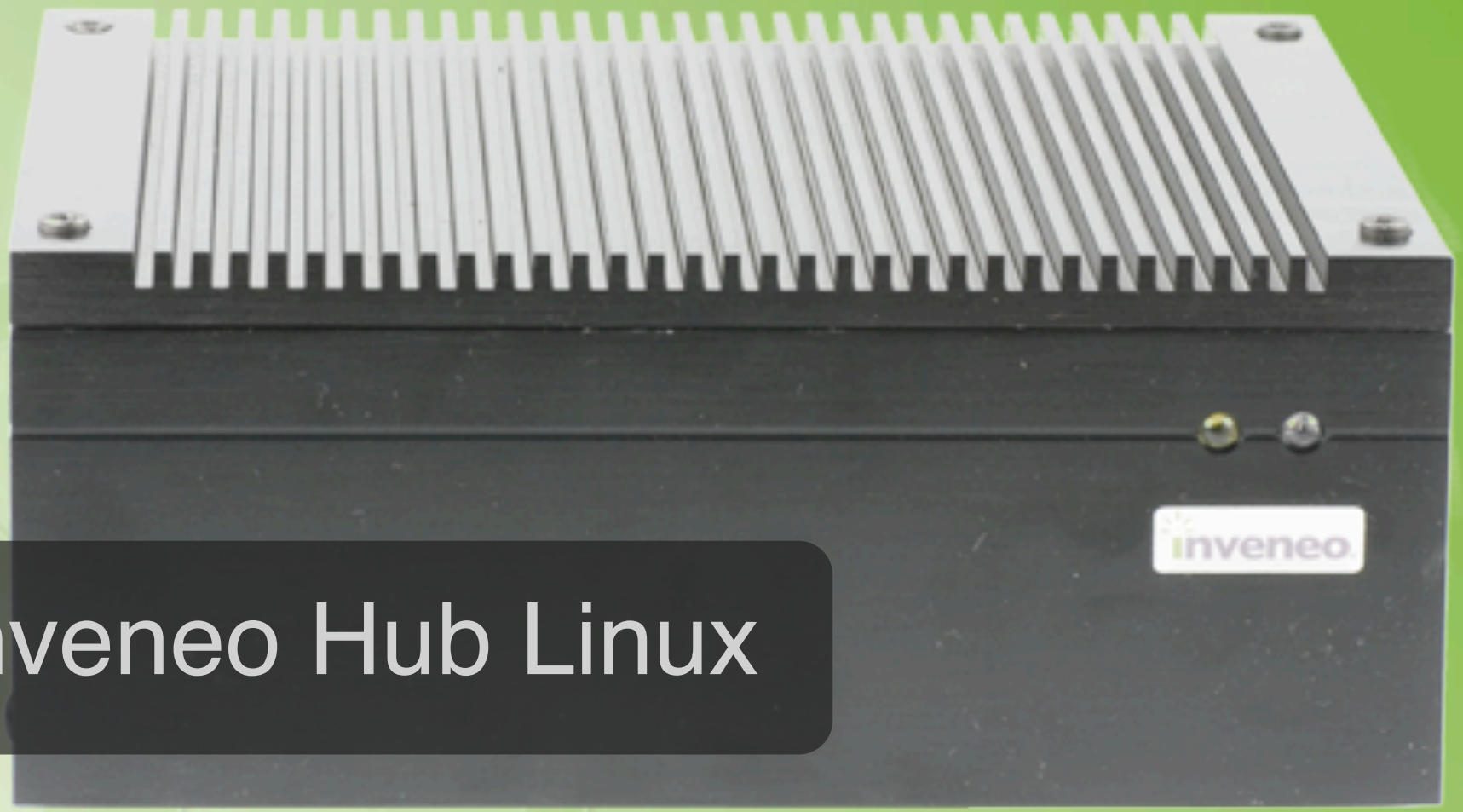


Inveneo Hub Linux

Advantages of IHL

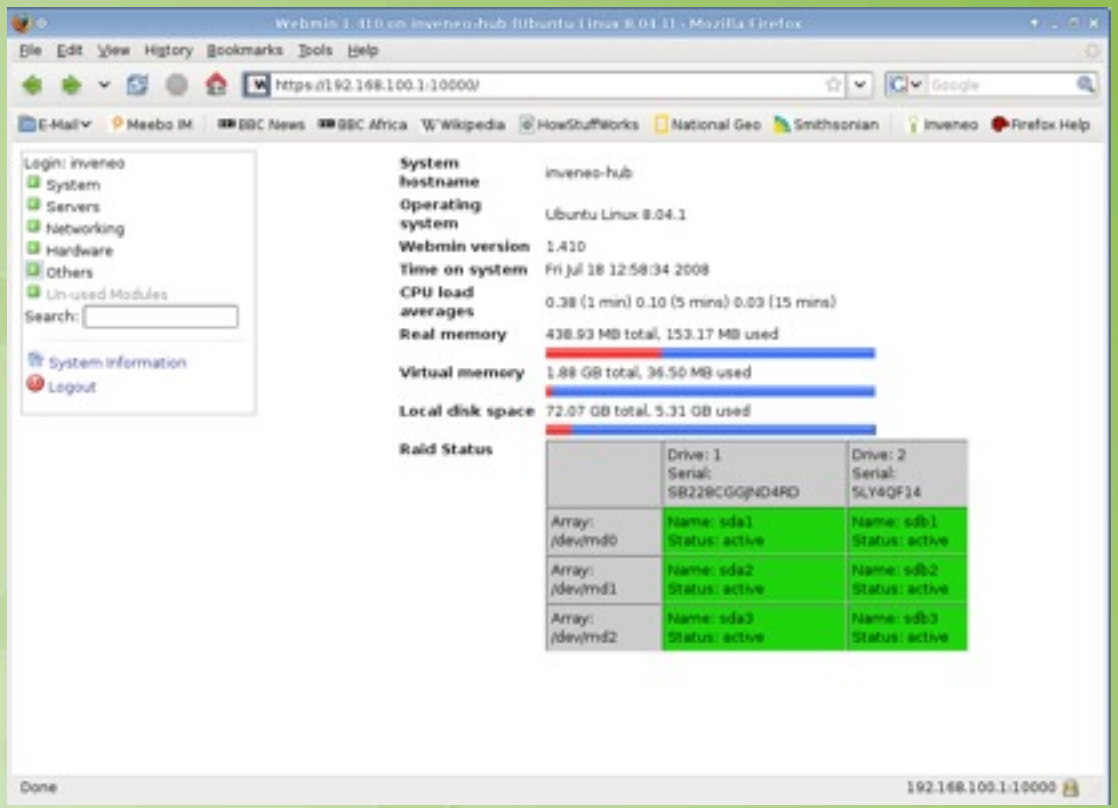
Based on Gnu/Linux FOSS

- No licensing fees or activation keys
- Almost no viruses or spyware

Tight integration with Inveneo Desktop Linux

- Automatic IDL discovery of IHL
- Smooth file sharing

Webmin



All of IHL's functions can be managed using the webmin, which is accessed via an Internet browser on a client machine.

IHL Functions

- File Sharing
  - Secure storage
  - Files available to all stations
- Dynamic Network Configuration (DHCP)
- Web Caching and Proxy
- Web Server
- VOIP
- Security (Firewall, NAT)
- RAID 1 mirroring
- Other Services (Database and Locally Stored Content)

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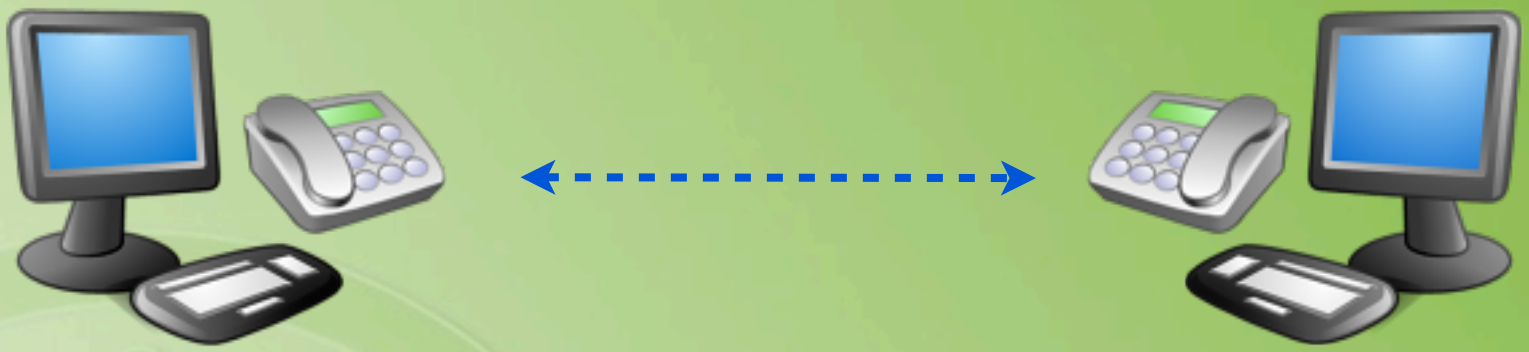
Turning On and Off Services

Asterisk

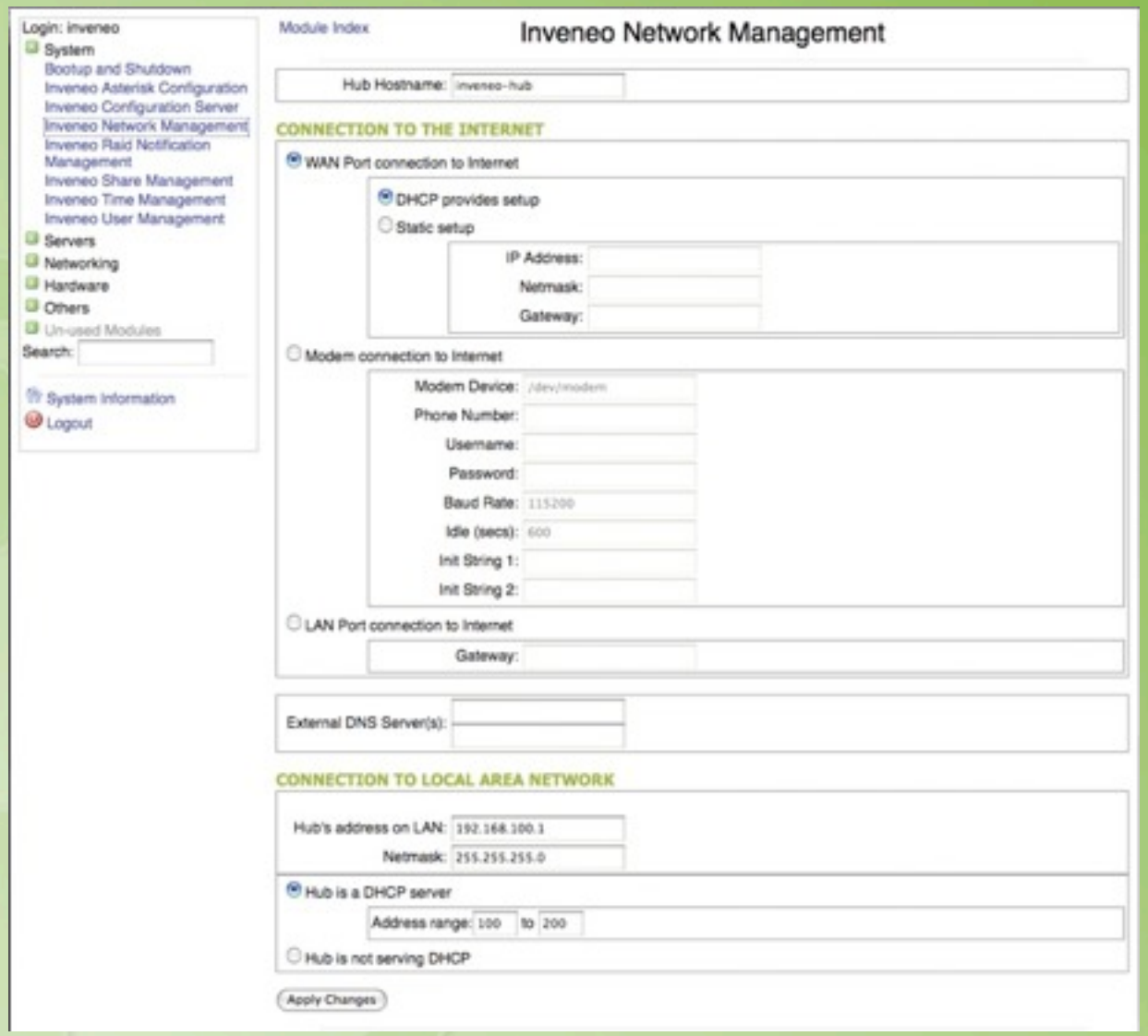


Provides free phones calls among people using the same LAN.

A basic Asterisk system works as if all its phones were within one office building, but the offices can be many kilometers apart.

The basic asterisk configuration does NOT connect to the cellular network.

Network Management

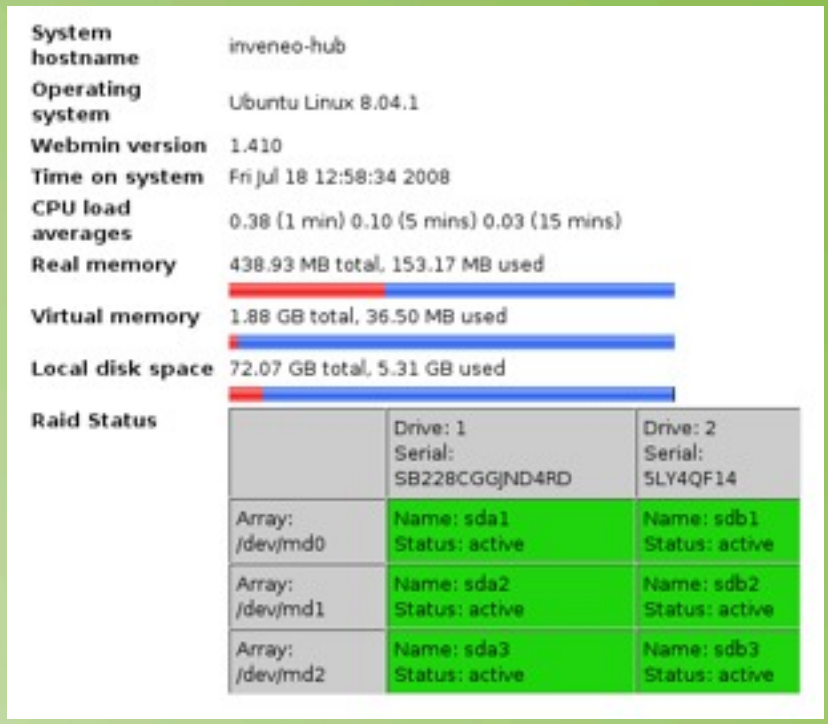


Mirror RAID

IHL uses RAID 1, which means that the server's 2 hard drives store identical information. Each hard drive is a mirror images of the other.

RAID 1 provides data redundancy. If one hard drive fails, the other hard drive will take over. Thus, the user does not lose their files or functionality of the server.
A repair technician can later replace the failed drive, and the system will automatically re-copy data from the working drive.

The webmin home page shows RAID array status.



System hostname	inveneo-hub
Operating system	Ubuntu Linux 8.04.1
Webmin version	1.410
Time on system	Fri Jul 18 12:58:34 2008
CPU load averages	0.38 (1 min) 0.10 (5 mins) 0.03 (15 mins)
Real memory	438.93 MB total, 153.17 MB used
Virtual memory	1.88 GB total, 36.50 MB used
Local disk space	72.07 GB total, 5.31 GB used

Raid Status

	Drive: 1 Serial: SB228CGGJND4RD	Drive: 2 Serial: 5LY4QF14
Array: /dev/md0	Name: sda1 Status: active	Name: sdb1 Status: active
Array: /dev/md1	Name: sda2 Status: active	Name: sdb2 Status: active
Array: /dev/md2	Name: sda3 Status: active	Name: sdb3 Status: active

Share and User Management

Share is another name for folder.

Similar to file sharing on Windows, IHL offers shared or private file storage.

Adding users in IHL is not the same as creating users in Windows, who can log directly into the server. In IHL, users merely own shares. The user who owns the share determines which users can access information in the share.

Time

IHL acts as a NTP time server, so that IDL clients can automatically display the time set in IHL. *Note: IDL does set its own time zone, so IHL and IDL must be set to the same time zone.*

The time management console in IHL webmin

Printing

IHL can share a USB printer with clients on the network. The printer is first installed on the server, then client machines install the network printer. Any client machine, even if it is not in the same building as the server, will be able to print to the shared printer.

Adding Content

When an Internet connection is slow or there is no Internet connection, content can be stored on the server.

Schools and community centers can benefit greatly from having locally stored content, like Wikipedia.

Exercise

1. Set time and time zone
2. Set static IP on WAN
3. Install printer
4. Create users and shares