Private Cloud Box

Scenario:

Bob buys a small box (< 100$). He connects 1TB hdd to the USB port on the box, plugs the box into AC, plugs ethernet cable from his pc to the box. Then he opens web browser and points it to x.x.x.x. He goes to the settings and configures wifi module to connect to his wifi router. (he could also simply connect to his router through ethernet port). Then he configures his home router to forward some port, in order to be able to access his private cloud outside of the LAN. (Dynamic IP can be solved using dynamic DNS) That's it.

Now Bob is able to access all of his documents, videos, images from anywhere in the world and from any device (tablet, smartphone, public desktop pc, his private desktop pc, ...).

Requirements

Small box with the following components inside:

* Embedded device. Should be able to run Linux with some web server (node, nginx, lighttpd, ...) and ftp server. Should have enough CPU power to stream video to the client. Should have Ethernet port (not mandatory). Should have USB 2.0 (3.0 is better) port.
* WIFI module. Should allow > 50Mbps transfer rate.

Web App:

* Should be able to play video stream from the server (open source plugin?)

watch your favourite movies from anywhere and from any device. there is no need to

download

* Should allow file system browsing (open source plugin?)

download and upload different files from anywhere

* Should provide convenient picture viewing (open source plugin?)
* Should provide convenient mp3 player (open source plugin?)

all your music in one place, which you can listen in your car, metro, office, ...

* Should provide rich text editor (open source plugin?)

edit your documents, read your favourite books

* Should be rendered nicely on majority of mobile devices

First Iteration

There is no need in Wifi module for the first iteration.

Future Requirements

* integration (file system sync) with popular OSes: Linux, Windows, Android, Mac, iOS
* board design (in order to make the production price lower and to be not dependent on specific vendor
* allow streaming from a web cam connected to the box through USB