

How we are fixing the World Internet In A Box (IIAB)



Shanti Bhardwa

Volunteer – Retired after 40 years in IT

Working with IIAB Developers & Global Community

People who make it possible to share World's free & open source knowledge



Objectives

- What is **IIAB**?
- How to build an **e-Learning** Centre for Remote Communities who do not have any Internet Access
- What does **IIAB** Deliver?
- Show how **simple** it is do build and use **IIAB**
- Create some Interest so that we can get people to **contribute** to the IIAB Development

My Profile

- Volunteer – supporting several Charities working in sub-Saharan Africa
- One example - Turing Trust (<https://turingtrust.co.uk/>)
- working in Malawi (created to promote the legacy of Alan Turing – pioneer of modern day computing)
- IT Professional & Technician – Retired now after a long career - now is the time to give something back by joining the Global Open Source Community



IIAB

- You Tube Video -
<https://www.youtube.com/watch?v=S79H7vYRMuM>
- Git Hub Repository and Release Notes -
<https://github.com/iiab/iiab/wiki/IIAB-7.2-Release-Notes>
- Use any popular Linux Platform
- Run the One line Build Script - `curl d.iiab.io/install.txt | sudo bash`
- Note : **Static Content**, mainly as Educational & Reference Material served up locally in a safe way
- How you can contribute - <http://internet-in-a-box.org/pages/contributing.html>

What is an e-Learning Centre ?

- ICT facility using the concept of **Internet In A Box (IIAB)**
- Built using computers such as Raspberry Pis, Refurbished Desktops, Laptops and Tablets
- Uses re-cycled items like monitors, keyboards, mice, head phones, home Routers – **items that may end up as e-Waste**
- A Local Area Network with Desktops and Servers – all using Open Source Software – **no licence costs**
- Designed for schools and clinics for Communities who do not have access to traditional Internet Services
- Users can access the latest digital content in a safe & self contained environment – **no usage costs**
- Can be viewed as a **Virtual Library** and **Classroom** with thousands of electronic books and videos which can be used for teaching, self learning and doing research

Example of Re-Cycling for Malawi



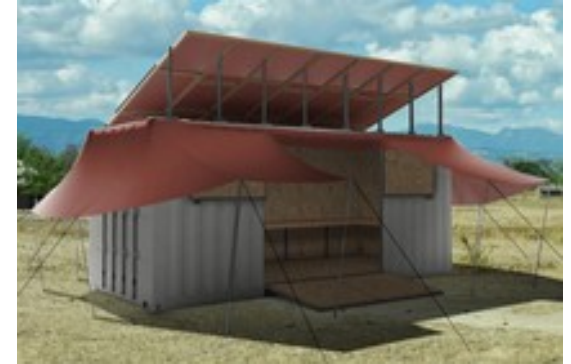
1. Items Donated in UK



2. Re-furbished by volunteers in UK



3. Shipped in a container to Malawi



4. Container made into Solar Powered e-Learning Centre in Malawi



E-Learning Centres in Africa



Use built-in WIFI on PI3B+
or
External Router as Access Point
with SSID & password

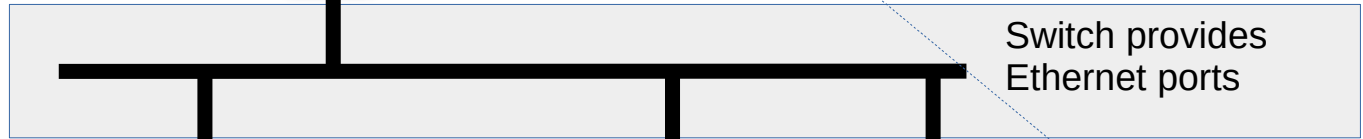
PI3B+ with Server on
External SDD
IP address
192.168.0.100



Router provides the
WIFI hotspot and
the logical LAN
e.g. 192.168.0.xx.

IIAB

192.168.0.xx



Switch provides
Ethernet ports

Ethernet
Clients

Ethernet
Clients

WIFI
Clients

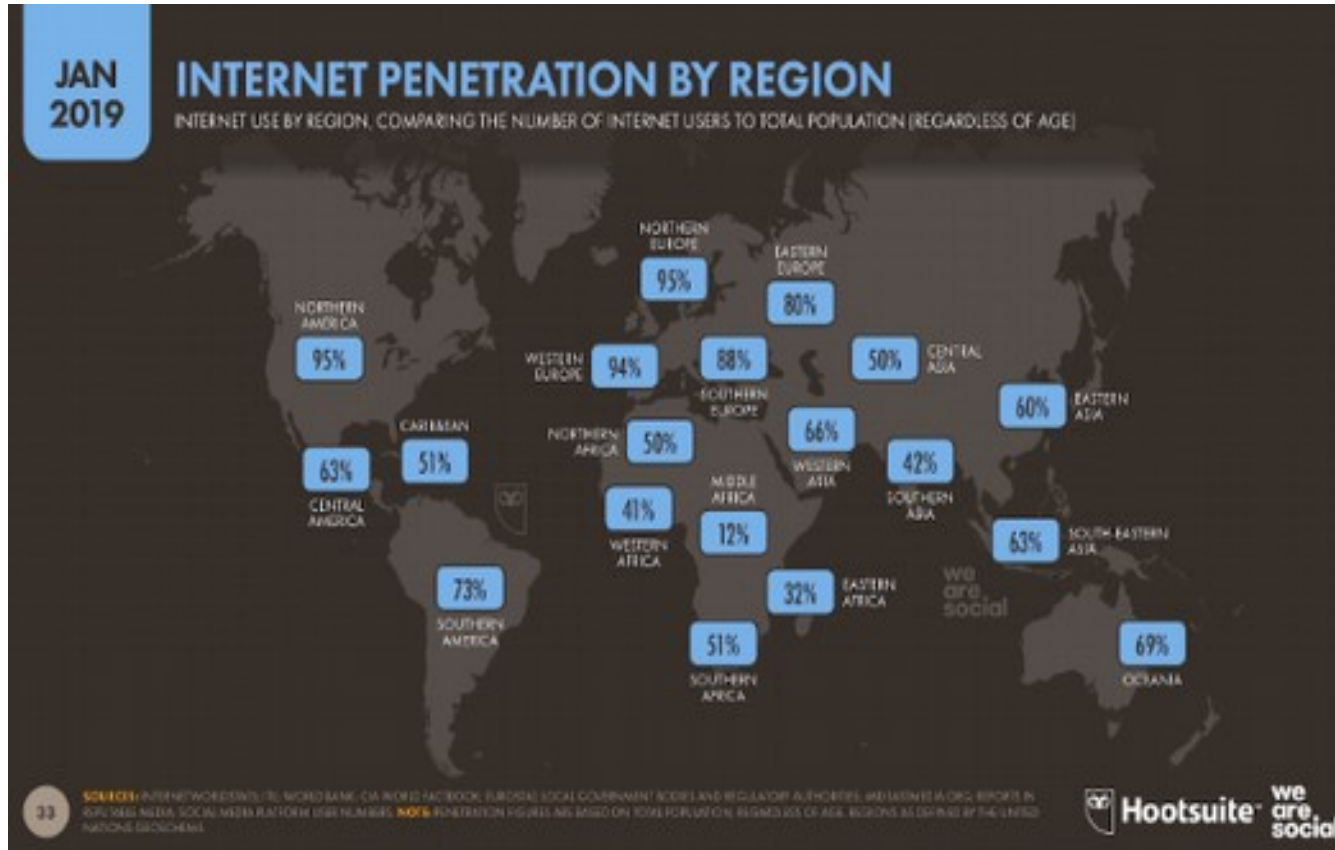
WIFI clients
connect to
Router SSID
with password

All clients use a Browser
and type the IP address
of the server
e.g. 192.168.0.100



Chrome, Chromium
Firefox work the best

Availability of the Internet

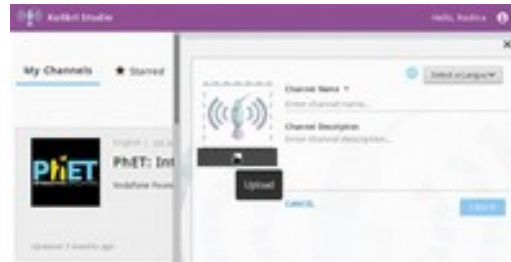
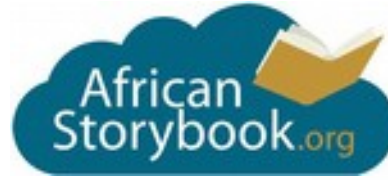


Note:
Sub-Saharan Africa
Is only **12%**

Many communities
do not even have
Grid Power

IAB fills a gap in a
small way

IIAB Delivers Multi-language Content – Few Examples



WORDPRESS

Questions?

- Contact me at

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