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# Village Telco

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## Abstract



## Preface



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# List of Algorithms













# Chapter 1

## Introduction

- 1.1 Motivation
- 1.2 Problem Description
- 1.3 Methodology
- 1.4 Limitations



# Chapter 2

## Background

### 2.1 Village Telco

### 2.2 Mesh Potato



**Figure 2.1:** The first generation Mesh Potato, MP01

The Mesh Potato, as shown in Figure ??, is designed to be used in rural areas. It can be deployed and run anywhere in the world relying only on a low, but stable power supply. The ethernet port, Foreign eXchange Station (FXS) ports and power are robust and designed to handle hard weather, poor power conditions, lightening and static electricity. In addition the Mesh Potato comes in a waterproof box for outdoor mounting [1].

The Mesh Potato combines the features of a 802.11bg WiFi router with an Analog telephone Adaptor (ATA) [2]. Each Mesh Potato provides a single fixed telephone line to the end user. The MPs are connected together via a mesh WiFi network, and configure themselves automatically to form a peer-to-peer network, greatly extending the range of the network over regular WiFi. Enabling phone calls to be

made independent of landlines and telephone towers. Creating the basis for the "plug-and-play" solution.

The Mesh network can be connected vi a backbone link to the rest of the world by using VoIP trunks.

MP02

## **2.3 Technology**

### **2.3.1 Ad Hoc and Mesh Networks**

### **2.3.2 OpenWrt**

## **2.4 The Cost Structure and Revenue Model(s) of Village Telco Today**

## **2.5 Comparison of Village Telco and Other Telcos**

## **2.6 Refugee Camps**

### **2.6.1 The Existing Communication Methods**

# References

- [1] V. Telco, “Background village telco,” Last edited: 2013. <http://wiki.villagetelco.org/Background>, accessed 20.02.2014.
- [2] V. Telco, “Mesh potato,” 2013. <http://store.villagetelco.com/mesh-potatoes/mesh-potato.html>, last accessed 20.02.2014.