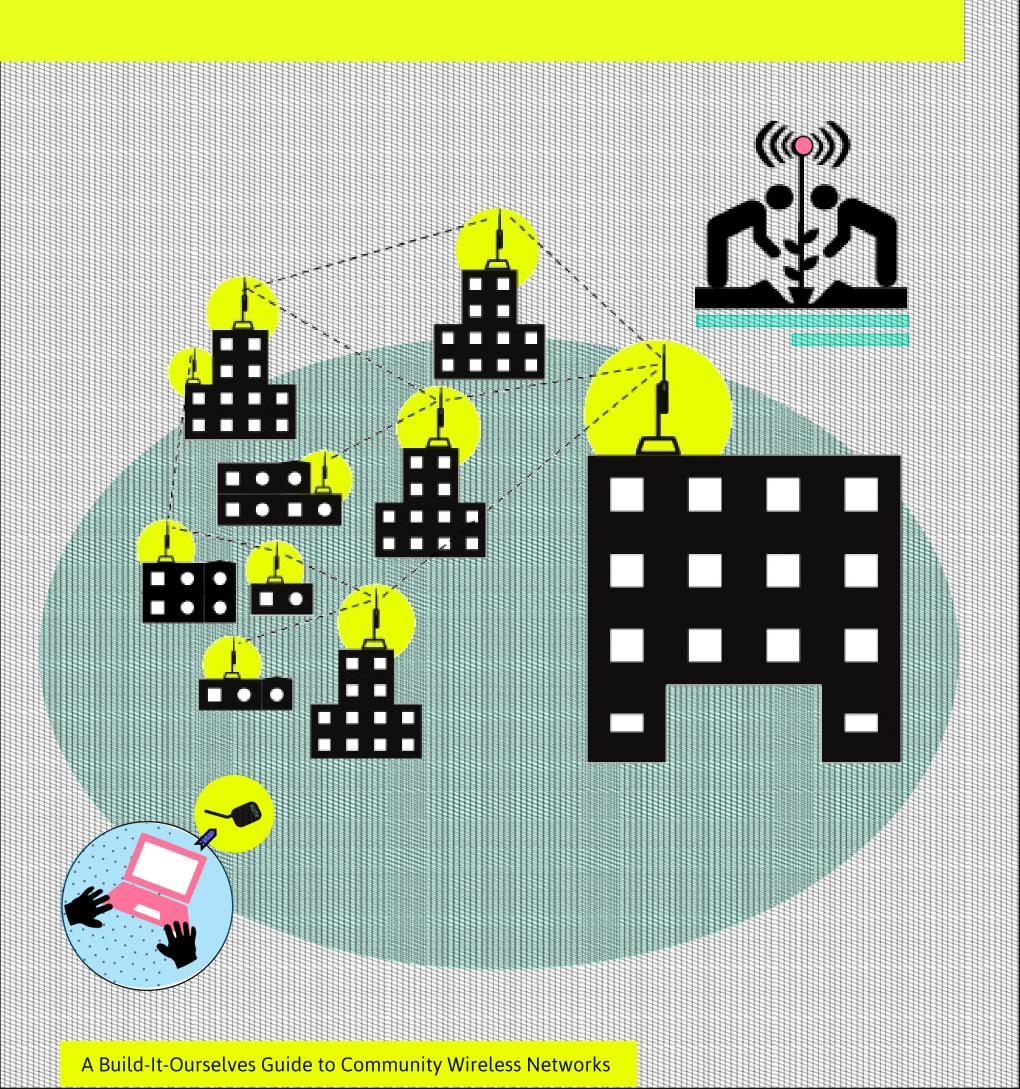
# Intro to Community Wireless Networks



# What is a Community Wireless Network?



Open community wireless networks digitally connect communities, and allow neighbors to share Internet access or use locally hosted applications. Neighbors are linked from rooftop to rooftop using wireless equipment.



Ownership and management duties are distributed among the community.

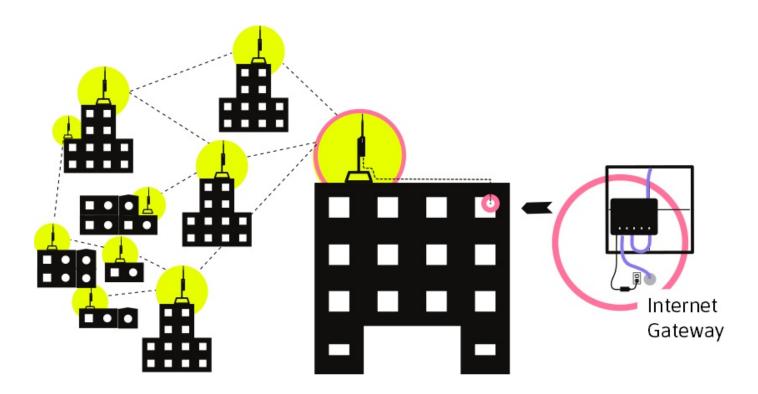


Community networks are built by a coalition of community anchor institutions, community-based organizations, municipal representatives, and individuals working together to plan, design, and deploy a network.

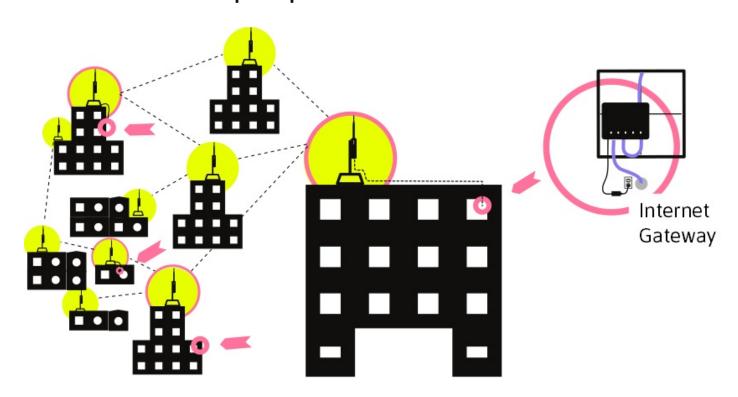


Digital Stewards are community members that take care of the network.

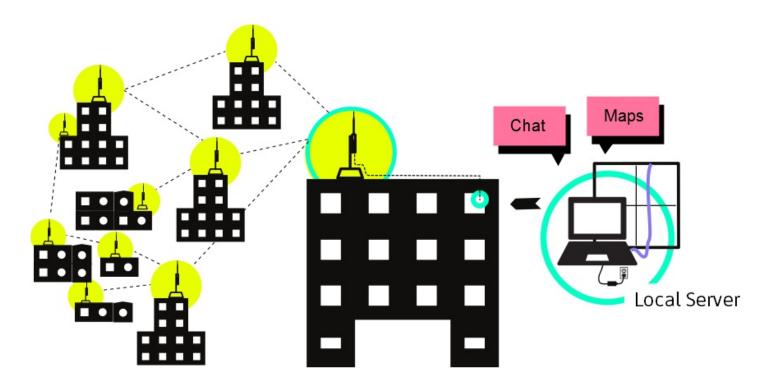
A network can distribute and share Internet access from one place.



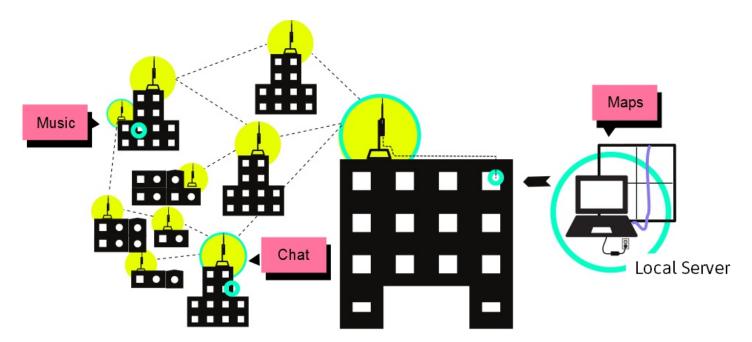
Or, from multiple places.



A network can distribute local applications from a local server.



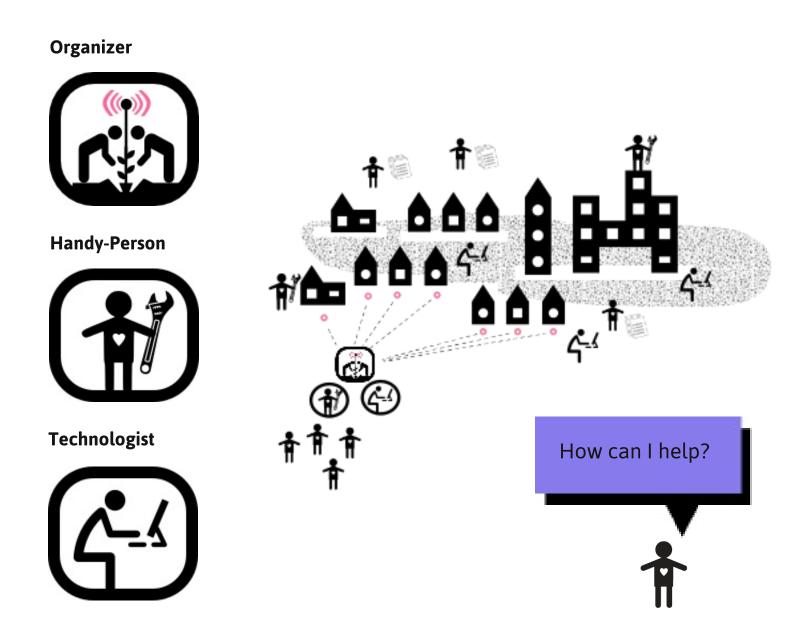
Or, from multiple local servers.



## What skills do we need?

Community wireless networks require many different skills. For example, artists and designers popularize the network, electricians and handy-people teach others how to mount routers on buildings, organizers talk to people about the network and hold public meetings, technologists create local applications, community members host equipment on the roof or in their window. Everyone has an important skill to offer.

Who has these skills in your community?



## **Getting Started**



#### **Identify Community Partners**

The essential step is to decide which partners will develop, plan and maintain the network.



#### **Outreach and Planning**

Surveys, community meetings, and transparent or participatory budgeting can ensure that the network gets local support. Manage expectations by presenting the project as a collaborative effort, not a free service.



#### **Plan the Network Together**

Plan the initial network to connect key locations in the community.



Organize Digital Stewards to Manage the Network For long-term sustainability, think early on about who will handle maintenance and troubleshooting.



#### **Installation and Configuration**

OTI has simple guides to installing Commotion software onto routers. There are several other good firmware options—most are based on a router operating system called OpenWRT.

## The Neighborhood Networks Construction Kit can help you organize and plan in your community.

The Neighborhood Networks Construction Kit includes activities you can use in your communities to help planning, building and govern the network together. These are useful no matter what equipment and firmware you choose to use.

There is no one right way to move through the activities. You will find tools to help you learn the software and build and mount the hardware, as well as tools to help you organize with others in your neighborhood to plan, build, and promote a network. The modules are designed to be used by individuals or groups for self-guided learning or to teach workshops or trainings. Start to explore anywhere and let us know how it goes for you.

#### http://communitytechnology.github.io



## **Related Information**

Wireless Networking in the Developing World

A practical guide to designing and building wireless networks in local communities. The book can be downloaded or purchased.

http://wndw.net/

#### **Altermundi Documentation**

A growing collection of documentation related to Altermundi's community network in Argentina. Currently the documentation is in Spanish.

http://docs.altermundi.net/RedesMiniMaxi/