

Local Servers for Local Networks

What is a Local Server?

Most of the web sites we visit and applications we use are accessed over the Internet. These are sometimes called “network applications” – everything is stored on a computer somewhere on a network. For example, if you check your email using a web browser, that “webmail” application is a network application since it retrieves information about the emails in your inbox from another computer. That computer is called a **server**, and is responsible for “serving” information to your personal device or computer. A web server is simply a server that provides information needed to display a website, while an email server is a server that sends and receives email information. A network application that requests information from a server is also referred to as a “client”.



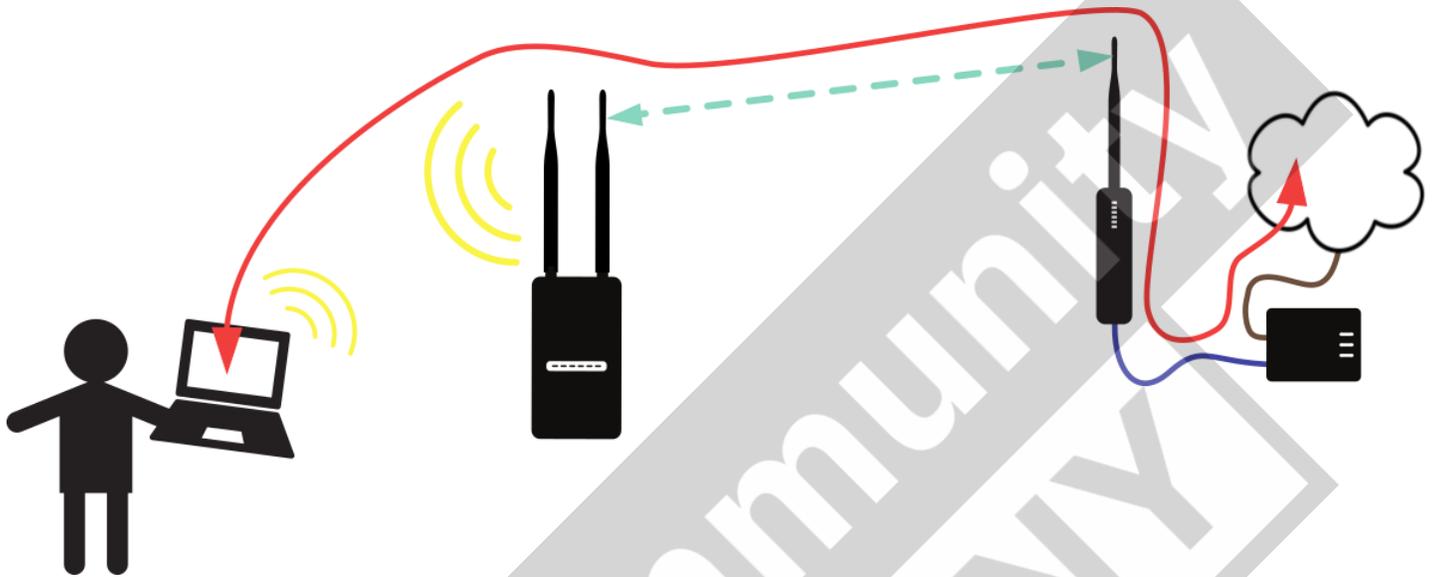
Network applications communicate with a server, but that server does not have to be physically connected to the Internet. Sometimes the server is just connected to a community or neighborhood network. Many applications do not need access to the Internet to work, which means that the applications running on a local server would be useable whether or not that network is connected to the Internet!

What is a local application?

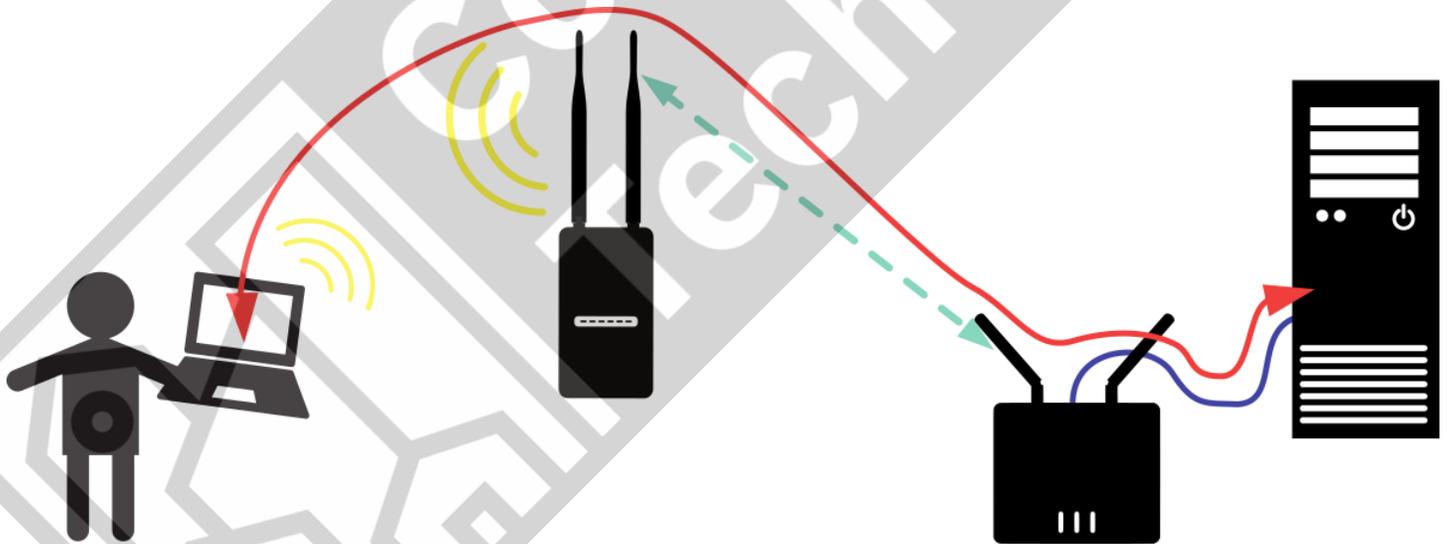
Applications are a great way to provide tools that address community-specific needs. An application is a program or piece of software designed and written to fulfill a particular purpose, such as a word processor, image editor, navigation system, or messaging application.

Applications can come in many forms. Sometimes applications are installed on a device, such as a smartphone app or a desktop program. Examples of this would be a calendar app on your Android phone, or a solitaire card game on your computer. Many times, however, applications are accessed in a web browser instead of being installed. An example of this would be Etherpad, a collaborative document editor (<https://pad.riseup.net/>). Local networks make it possible to provide applications that are available only when you are connected to the local network.

Below, we can see two examples of accessing applications. In the first, the user is connecting to a website or application on the Internet. The connection travels over the local network, but then exits and goes somewhere – anywhere! – else.



In the next diagram, the connection to the application stays local. The user's request and information never travels over the Internet (at least for this application).



In the same way a local network allows multiple people to share a connection to the Internet, running a local server makes it possible for people to share other resources and information. All while keeping communications local and resilient

List of Local Applications

Below you will find some suggestions for local applications you can try installing on your network. The list is by no means exhaustive, but it should help you get an idea of what's available.

- Social networks:
 - diaspora*: <https://diasporafoundation.org/>
- File storage and sync:
 - OwnCloud: <http://owncloud.org/>
 - Pydio: <https://pydio.com/>
- Collaboration:
 - Etherpad: <http://etherpad.org/>
 - Ethersheet: <https://ethersheet.org/>
 - EtherCalc: <https://ethercalc.net/>
 - MediaGrid:
<https://github.com/dismantl/MediaGrid/>
 - MoinMoin: <http://moinmo.in/>
 - Kolab: <https://kolab.org/>
 - dudle: <https://dudle.inf.tu-dresden.de/>
- Publishing:
 - Wordpress: <http://wordpress.org/>
 - Ghost: <https://ghost.org/about/>
- Multimedia:
 - MediaGoblin: <http://mediagoblin.org/>
 - icecast: <http://icecast.org/>
 - GNU FM:
<https://www.gnu.org/software/gnufm/>
 - img.bi: <https://img.bi/>
 - Piwigo: <http://piwigo.org/>
 - Zenphoto: <http://www.zenphoto.org/>
- Miscellaneous:
 - Tidepools: <http://tidepools.co/>
 - kiwix: <http://www.kiwix.org/>
 - Coder:
<https://github.com/googlecreativelab/coder/>
- Other: <https://prism-break.org/en/categories/servers/>

There are many more – any platform that can be downloaded and hosted on a server is a candidate for using locally on your network.

Community
Tech

