Port Forwarding Explained

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A typical home network has the following components:

- Internet
- DSL/Cable modem/router (with an Internet IP address)
- Home network
- Thermostat (with a LAN IP address)

The easiest analogy for Port forwarding is a telephone switchboard.

1. Jennifer is calling Joe at his office.
2. She calls the main line (212) 555-1000
3. The switchboard answers the call and Jenifer asks for Joe
4. The switchboard makes the connection and Joe's line rings at his desk.

In this analogy, the telephone network is analogous to the Internet connection you have

1. The main line is your router's Internet IP address
2. The switchboard is like the router
3. The company phone directory is like the port forwarding rules
4. Joe is the thermostat

	Is…	**Has…**		**Is…**	**Has…**
Internet	a public network connecting computers	millions of computers	**Phone system**	a public network connecting phones	millions of phones
DSL/Cable modem	the gateway between the Internet and your home/office. Routes Internet traffic.	A public Internet address Ex: 128.2.23.44 Or www.google.com	**Switchboard**	a gateway between the phone network and the office phone system. Routes phone calls.	A public phone number Ex: (212) 555-1000
Home network / LAN	the local network in your home		**Office phone system**	the office phone system	
Computers & devices in the home	Your thermostat	a LAN (Local Area Network) IP address Ex: 192.168.1.1	**Employee with phone extension**	Joe	an extension Ex: x4567