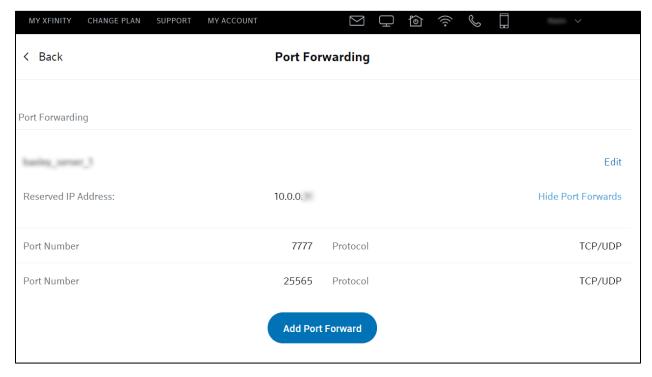
## How to Port Forward a Windows Computer on Xfinity Wi-Fi

Setting up a server for a programming project or video game server can be interesting and fun, but even if you design an optimal server for access, no one will be able to reach it from outside your house because your router turns the connections down. To allow the connections through this firewall, you must tell the router to forward them to your server. This instruction set will explain how to create this port forward to a Windows Computer on Xfinity wi-fi in about 10-15 minutes.

These instructions are simple, though it assumes you understand how to use a web browser. This instruction set will use Windows 10, though most Windows versions should work. It is also designed for the Xfinity internet provider, though they will work with some variation for any other provider.

## You will need:

- The server computer you want to port forward
- Connection to the wi-fi the computer will be connected to
- The login details to the account associated with Xfinity
- You can also use your own personal computer to access the internet if that is more convenient.

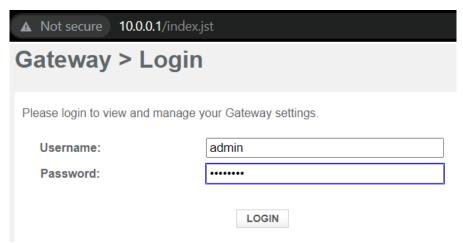


Several forwarded ports on one server. Server and IP blurred out for security.

## Phase 1: Reserved IP / DHCP Reservation

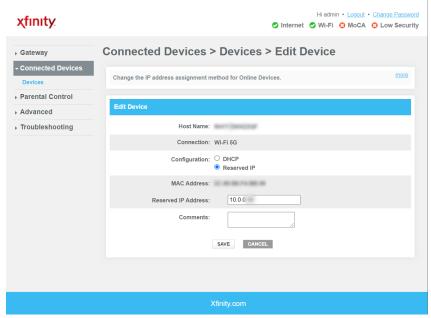
Some internet providers (like Xfinity) perform this step automatically when creating a port forward, but for this instruction set the steps will be gone over.

- 1. Navigate to **10.0.0.1** in a web browser (do not search for it, just type it in the URL bar).
- 2. If you have never logged in to the router, the username is **admin** and the password **password**. Otherwise, the password is whatever you set the first time you entered.



The Xfinity login page at the webpage 10.0.0.1

- 3. Navigate to **Connected Devices**, then find and click on your server on the list and click **edit.**
- 4. Switch the configuration from **DHCP** to **Reserved IP**, then click save.

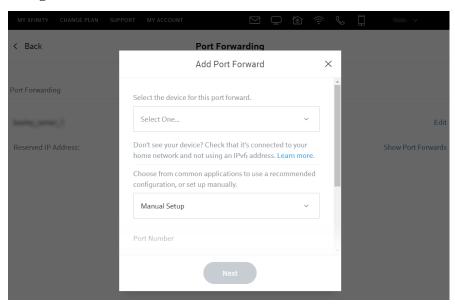


This is what the Xfinity IP reservation page should look like when you are done (private information blurred)

## Phase 2: Port Forwarding

Now that the server has an unchanging IP address, you can proceed with the actual port forwarding.

- 1. Navigate through the router site (the same from the previous step) to **Advanced > Port Forwarding**.
- 2. Follow the link to the Xfinity website. Log in to your account.
- 3. Navigate through: View Network Details > See Network > Advanced Settings > Port Forwarding > Add Port forward



You should see a popup like the one above.

4. Select your server from the first dropdown, and then under **Port Number** type the correct port.

port.	
HTTP	80
HTTPS	443
SSH	22
SMTP (outgoing email)	25, 587, 465
POP3 (incoming email)	110, 995
Gaming / Other	Various (1024-49151)

Click the **next** button, and you should receive a confirmation popup. Congratulations! You have just successfully port forwarded your server. It is now accessible by anyone looking to connect. Test that you were successful by attempting to connect to your server from another internet connection.