

## Remote Access 101: Port Forwarding

Basic instructions on port forwarding your router with instructions for routers from some specific manufacturers.

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## What is Port Forwarding?

Most home routers or gateways use a NAT firewall to protect your home network from the Internet.

NAT or Network Address Translation works by hiding your computer's IP address from internet devices and replacing it with the gateway IP address. It will then forward internet traffic to the proper computer.

To further protect your home network, the NAT firewall disallows unrequested traffic from the internet. Some applications, such as Torrents and Remote Access, require unrequested inbound connections. To use these features with your StorCenter device, you will need to configure your router to allow inbound connections for these applications. This is known as Port Forwarding.

## Configuring Port Forwarding

The Iomega StorCenter will attempt to automatically configure your router to port forward for remote access, once that feature is enabled. If the StorCenter is unsuccessful or if you need to use other features such as torrent download or FTP, you will need to manually configure your router.

**NOTE:** Before port forwarding, you will want to change your StorCenter to a static IP address.

The port forwarding steps will vary depending on your router. You will need to consult the user's manual that came with your router for more information. In most cases you should look for a section on port forwarding OR application access.

Although, Iomega cannot provide you with exact steps for your router, we can provide some information on settings fields commonly found on Port Forwarding screens. (Not all fields are found on all devices. Fields may appear in a different order on your router.)

**Linksys Users:** In addition to Port forwarding you will need to deselect Block Anonymous Internet Requests on the Firewall settings page.

### Port Forwarding Settings

Description	Protocol	External Port*	Internal Port	IP Address
Remote Access	TCP	443	443	StorCenter IP†
Torrent	TCP	6881-6999 or 49152-65535‡	6881-6999 or 49152-65535‡	StorCenter IP†
FTP	TCP	21	21	StorCenter IP†

\* Generally the External and Internal port settings will match; however, since a port can only be forwarded to one device you may need to change the external port to avoid a forwarding conflict. For example, if your router has external (web) configuration enabled it may already be using port 443. You may need to set the external port to 8080, etc. Ports 49152-65535 are not registered to a specific application and should not cause conflicts.

† You can find your StorCenter device's IP address on the **Settings** → **Network Services** → **Network Settings** screen.

‡ These must match the port range you set in the **Torrent Downloads** screen under the Settings tab. Some Internet Service Providers block ports 6881-6999.



## Router Specific Settings

This section will give you step by step instructions for setting up port forwarding on common router models. Your router may differ from these instructions based on its model and firmware version. If these steps do not match your router, see your router's documentation or visit [portforward.com](http://portforward.com). Iomega is not responsible for the information on portforward.com. The StorCenter uses HTTPS for remote access. Make sure you select instructions for forwarding the HTTPS service.

**NOTE:** These instruction explain how to port forward your home network. You may not be able to connect from remote networks if port 443 (Remote Access) and port 21 (FTP) are blocked. Check with the remote network's administrator for information on security policies. Iomega is **NOT** responsible for network intrusions caused by opening ports in your internet gateway's firewall (port forwarding).

### Actiontec Routers

1. Log into your router by entering its IP address in the browser's URL field. The default IP address for this router is **192.168.0.1**.
2. If necessary, enter your router's username and password, then click OK.
3. Click Setup/Configuration in the Main Menu.
4. Click Advanced Setup in the left-hand navigation pane.
5. Click Begin Advanced Setup.
6. Click Port Forwarding in the left-hand navigation pane.
7. Enter **443** in both field under **IP Port Range**.
8. Select **TCP** from the **Protocol** drop-down menu.
9. Enter the IP Address of your StorCenter in the **IP Address field**.
10. Click **Add**.
11. If you are only forwarding the ports for Remote Access, skip to step 16. For information of port forwarding FTP, proceed to the next step.
12. Enter **21** in both field under **IP Port Range**.
13. Select **TCP** from the **Protocol** drop-down menu.
14. Enter the IP Address of your StorCenter in the **IP Address field**.
15. Click **Add**.
16. Click **Save and Restart**.

These instructions are based on an Actiontec GT701-WG with QW04-3.60.2.0.6.3-GT701-WG firmware.



## Apple Airport Extreme, Airport Express, and Time Capsule Routers

1. Launch the **Airport Utility** located in the Utilities folder on the Mac (/Applications/Utilities/) or in the Airport programs group under the Windows Start Menu (Start→All Programs→Airport).
2. Double click your router in the left-hand navigation pane. If your base station does not automatically appear, try rescanning the network. You can also manually enter the IP address of your base station. The default IP address is **10.0.1.1**.
3. Enter your username and click **OK**. By default, the password is **public**. You will **NOT** be prompted for a username.
4. Click the **Internet** tab.
5. Click **NAT**.
6. Check the box for **Enable NAT Port Mapping Protocol**.
7. Click **Configure Port Mappings....**
8. Click the **+** (add) button.
9. From the **Service** drop-down menu, select **Choose a service**.
10. In the **Public TCP Port(s)** field, enter **443**.
11. In the **Private IP Address** field, enter your StorCenter server's IP address.
12. In the **Private TCP Port(s)** field, enter **443**.
13. Click **Continue**.
14. Enter **StorCenter Remote Access** in the Description field.
15. Click **Done**.
16. If you are only forwarding the ports for Remote Access, skip to step 25. For information of port forwarding FTP, proceed to the next step.
17. Click the **+** (add) button.
18. From the **Service** drop-down menu, select **Choose a service**.
19. In the **Public TCP Port(s)** field, enter **21**.
20. In the **Private IP Address** field, enter your StorCenter server's IP address.
21. In the **Private TCP Port(s)** field, enter **21**.
22. Click **Continue**.
23. Enter **StorCenter FTP** in the Description field.
24. Click **Done**.
25. Click **Update**.

These instructions are based on an Apple Airport Extreme with v7.41 firmware.



## Buffalo Routers

1. Log into your router by entering its IP address in the browser's URL field. The default IP address for this router is **192.168.0.10**.
2. If necessary, enter your router's username and password, then click **OK**. The Default username is **root**. The default password is blank.
3. Click **Internet Games (Port Mapping)** in the left-hand navigation pane.
4. Enter **443** in the **TCP** field.
5. Click the **Manual Configuration** radio button.
6. Enter your StorCenter's IP address.
7. Click **Apply**.
8. If you are only forwarding the ports for Remote Access, you have completed the configuration. For information of port forwarding FTP, proceed to the next step.
9. Enter **21** in the **TCP** field.
10. Click the **Manual Configuration** radio button.
11. Enter your StorCenter's IP address.
12. Click **Apply**.

These instructions are based on a Buffalo WHR-HP-G54.

## D-Link Routers

1. Log into your router by entering its IP address in the browser's URL field. The default IP address for this router is **192.168.0.1**.
2. If necessary, enter your router's username and password, then click **OK**. The Default username is **admin**. The default password is blank.
3. Click the **Advanced** tab.
4. Click **Port Forwarding** in the left-hand navigation pane.
5. Enter **StorCenter Remote Access** in the **Name** field.
6. Enter your StorCenter server's IP address in the **IP Address** field.
7. Enter **443** in both the **Start** and **End** fields
8. Select **TCP** from the **Traffic Type** drop-down menu.
9. Check the untitled box on the left-side of the line to enable the forwarding rule.
10. If you are only forwarding the ports for Remote Access, skip to step 15. For information of port forwarding FTP, proceed to the next step.
11. Enter your StorCenter server's IP address in the **IP Address** field.
12. Enter **21** in both the **Start** and **End** fields
13. Select **TCP** from the **Traffic Type** drop-down menu.
14. Check the untitled box on the left-side of the line to enable the forwarding rule.
15. Click **Save Settings**.

These instructions are based on a D-Link EBR-2310.



## Routers with DD-WRT Firmware

1. Log into your router by entering its IP address in the browser's URL field. The default IP address for this router is **192.168.2.1**.
2. If necessary, enter your router's username and password, then click **OK**. The Default username is **root**. The default password is **admin**.
3. Click the **Applications & Gaming** tab.
4. Click the **Port Range Forwarding** sub-tab.
5. Enter **StorCenter Remote Access** in the **Application** field.
6. Enter **443** in the **Start** and **End** fields.
7. Select **TCP** from the **Protocol** drop-down menu.
8. Enter your StorCenter server's IP address in the **IP Address** field.
9. Check the **Enable** box to enable the forwarding rule.
10. Click **Add**.
11. If you are only forwarding the ports for Remote Access, skip to step 18. For information of port forwarding FTP, proceed to the next step.
12. Enter **StorCenter FTP** in the **Application** field.
13. Enter **21** in the **Start** and **End** fields.
14. Select **TCP** from the **Protocol** drop-down menu.
15. Enter your StorCenter server's IP address in the **IP Address** field.
16. Check the **Enable** box to enable the forwarding rule.
17. Click **Add**.
18. Click **Save Settings**.

These instructions are based on DD-WRT firmware v23 SP2 on a Linksys WRT-54G.

## Linksys Routers (Original Firmware)

1. Log into your router by entering its IP address in the browser's URL field. The default IP address for this router is **192.168.1.1**.
2. If necessary, enter your router's username and password, then click **OK**. The Default username is blank. The default password is **admin**.
3. Click the **Security** tab.
4. Deselect **Block Anonymous Internet Requests**.
5. Click the **Save Settings** button.
6. Click the **Applications & Gaming** tab.
7. Click the **Port Range Forwarding** sub-tab.
8. Enter **StorCenter Remote Access** in the **Application** field.
9. Enter **443** in the **Start** and **End** fields.



10. Select **TCP** from the **Protocol** drop-down menu.
11. Enter your StorCenter server's IP address in the **IP Address** field.
12. Check the **Enable** box to enable the forwarding rule.
13. If you are only forwarding the ports for Remote Access, skip to step 18. For information of port forwarding FTP, proceed to the next step.
14. Enter **StorCenter FTP** in the **Application** field.
15. Enter **21** in the **Start** and **End** fields.
16. Select **TCP** from the **Protocol** drop-down menu.
17. Enter your StorCenter server's IP address in the **IP Address** field.
18. Check the **Enable** box to enable the forwarding rule.
19. Click **Save Settings**.

These instructions are based on DD-WRT firmware v23 SP2 on a Linksys WRT-54G.

## Netgear Routers

1. Log into your router by entering its IP address in the browser's URL field. The default IP address for this router is **192.168.0.1**.
2. If necessary, enter your router's username and password, then click OK. The Default username is **admin**. The default password is **password**.
3. Click **Port Forwarding** in the left-hand navigation pane.
4. Click the **Add Custom Service** button.
5. Enter **StorCenter Remote Access** in the **Service Name** field.
6. Enter **443** in the **Starting Port** and **Ending Port** fields.
7. Enter your StorCenter server's IP address in the **Server IP Address** field.
8. Check the **Enable** box to enable the forwarding rule.
9. Click **Add**.
10. If you are only forwarding the ports for Remote Access, you have completed the configuration. For information of port forwarding FTP, proceed to the next step.
11. Click the **Add Custom Service** button.
12. Enter **StorCenter FTP** in the **Service Name** field.
13. Enter **21** in the **Starting Port** and **Ending Port** fields.
14. Enter your StorCenter server's IP address in the **Server IP Address** field.
15. Check the **Enable** box to enable the forwarding rule.
16. Click **Add**.

These instructions are based on a Netgear RP614.



## Routers with Tomato Firmware

1. Log into your router by entering its IP address in the browser's URL field.
2. If necessary, enter your router's username and password, then click **OK**.
3. Click the **Port Forwarding** in the left-hand navigation pane.
4. Select **TCP** from the **Proto** drop-down menu.
5. Enter **443** in the **Ext Ports** and **Int Ports** fields.
6. Enter your StorCenter server's IP address in the **Int Address** field.
7. Enter **StorCenter Remote Access** in the **Description** field.
8. Check the **Enable** box to enable the forwarding rule.
9. Click **Add**.
10. If you are only forwarding the ports for Remote Access, skip to step 18. For information of port forwarding FTP, proceed to the next step.
11. Select **TCP** from the **Proto** drop-down menu.
12. Enter **21** in the **Ext Ports** and **Int Ports** fields.
13. Enter your StorCenter server's IP address in the **Int Address** field.
14. Enter **StorCenter FTP** in the **Description** field.
15. Check the **Enable** box to enable the forwarding rule.
16. Click **Add**.
17. Click **Save**.

These instructions are based on a Tomato v1.23 on a Linksys WRT-54G.



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