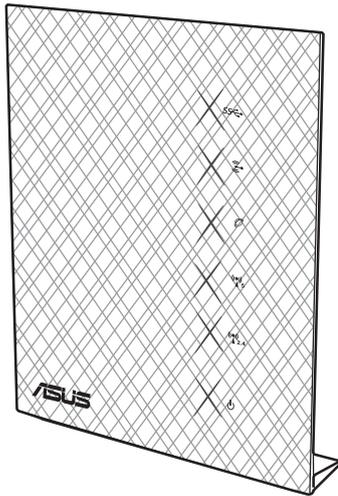# User Guide

RT-N65U

Dual-band Wireless-N750 Gigabit Router

The ultra-thin and stylish RT-N65U features a 2.4GHz and 5GHz dual bands for an unmatched concurrent wireless HD streaming; SMB server, UPnP AV server, and FTP server for 24/7 file sharing; a capability to handle 300,000 sessions; and the ASUS Green Network Technology, which provides up to 70% power-saving solution.

/ISUS ®

Inspiring Innovation • Persistent Perfection

E7376
First Edition
April 2012

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1   A quick look

Package contents

☑ RT-N65U Wireless Router   ☑ Network cable (RJ-45)

☑ Power adapter   ☑ Quick Start Guide

☑ Support CD (Manual, utility software)   ☑ Warranty card

NOTES:

- If any of the items is damaged or missing, contact ASUS for technical inquiries and support, Refer to the ASUS Support Hotline list at the back of this user manual.

- Keep the original packaging material in case you would need future warranty services such as repair or replacement.

Your wireless router

WPS button
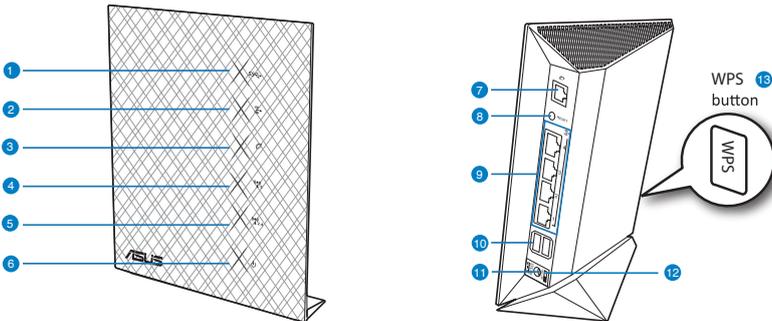
① USB LED
   Off: No power or no physical connection.
   On: Has physical connection to USB devices.

2   LAN LED
   Off: No power or no physical connection.
   On: Has physical connection to a local area network (LAN).

3   WAN LED
   Off: No power or no physical connection.
   On: Has physical connection to a wide area network (WAN).

4   5GHz LED
   Off: No 5GHz signal.
   On: Wireless system is ready.
   Flashing: Transmitting or receiving data via wireless connection.

5   2.4GHz LED
   Off: No 2.4GHz signal.
   On: Wireless system is ready.
   Flashing: Transmitting or receiving data via wireless connection.

6   Power LED
   Off: No power.
   On: Device is ready.
   Flashing slow: Rescue mode
   Flashing quick: WPS is processing.

7   WAN (Internet) port
   Connect a network cable into this port to establish WAN connection.
   Yellow LED: 1000Mbps connection.
   Green LED: 10Mbps/100Mbps connection.
   Flashing: Transmitting or receiving data via wired connection.

8   Reset button
   This button resets or restores the system to its factory default settings.

9   LAN 1 ~ 4 ports
   Connect network cables into these ports to establish LAN connection.
   Yellow LED: 1000Mbps connection.
   Green LED: 10Mbps/100Mbps connection.
   Flashing: Transmitting or receiving data via wired connection.

10   USB 3.0 ports
   Insert USB 3.0 devices such as USB hard disks or USB flash drives into these ports.

11   Power (DC-In) port
   Insert the bundled AC adapter into this port and connect your router to a power source.

12   Power Switch
   Slide up to turn ON the device or slide down to turn it OFF.

13   WPS button
   This button launches the WPS Wizard.

Mounting placement

To mount the wireless router into its stand:

1. Locate the two mounting holes at the bottom of the wireless router.

2. Latch the stand's two mounting hooks to the wireless router's mounting holes.

3. Slide the wireless router to direction of the arrow to secure it to its stand.
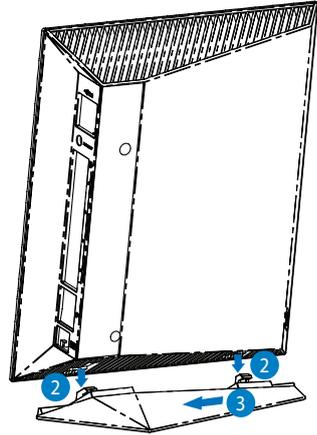
NOTES:

- Use only the adapter that came with your package. Using other adapters may damage the device.

- Specifications:

DC Power adapter	DC Output: +19V with max 1.58A current; +12V with max 2A current		
Operating Temperature	0~40ºC	Storage	0~70ºC
Operating Humidity	50~90%	Storage	20~90%

2 Creating your network

Positioning your router

For the best wireless signal transmission between the wireless router and the network devices connected to it, ensure that you:

- Place the wireless router in a centralized area for a maximum wireless coverage for the network devices.

- Keep the device away from metal obstructions and away from direct sunlight.

- Keep the device away from 802.11g or 20MHz only Wi-Fi devices, 2.4GHz computer peripherals, Bluetooth devices, cordless phones, transformers, heavy-duty motors, fluorescent lights, microwave ovens, refrigerators, and other industrial equipment to prevent signal interference or loss.

- For the best front-to-rear coverage, place the wireless router in an upright position.

- For the best up-and-down coverage, place the wireless router in an inclined position.

- Always update to the latest firmware. Visit the ASUS website at http://www.asus.com to get the latest firmware updates.
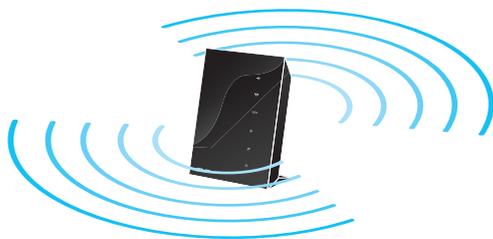
What you need

To set up your network, you need one or two computers that meet the following system requirements:

- Ethernet RJ-45 (LAN) port (10Base-T/100Base-TX/1000BaseTX)

- IEEE 802.11a/b/g/n wireless capability

- An installed TCP/IP service

- Web browser such as Internet Explorer, Firefox, Safari, or Google Chrome

NOTES:

- If your computer does not have built-in wireless capabilities, you may install an IEEE 802.11a/b/g/n WLAN adapter to your computer to connect to the network.

- With its dual band technology, your wireless router supports 2.4GHz and 5GHz wireless signals simultaneously. This allows you to do Internet-related activities such as Internet surfing or reading/writing e-mail messages using the 2.4GHz band while simultaneously streaming high-definition audio/video files such as movies or music using the 5GHz band.

- If you are using only one computer with single band IEEE 802.11b/g/n WLAN adapter, you will only be able to use the 2.4GHz band.

- If you are using only one computer with dual band IEEE 802.11a/b/g/n WLAN adapter, you will be able to use the 2.4GHz or 5GHz band.

- If you are using two computers with both IEEE 802.11a/b/g/n WLAN adapters, you will be able to use both 2.4GHz and 5GHz bands simultaneously.

- The Ethernet RJ-45 cables that will be used to connect the network devices should not exceed 100 meters.

Setting up your wireless router

✋ IMPORTANT!

- Use wired connection in setting up your wireless router to avoid possible setup problems due to wireless uncertainty.

- Before setting up your ASUS wireless router, do the following:

  - If you are replacing an existing router, disconnect it from your network.

  - Disconnect the cables/wires from your existing modem setup. If your modem has a backup battery, remove it as well.

  - Reboot your computer (recommended).

Wired connection

📝 NOTE: Your wireless router has an integrated auto-crossover function, so use either straight-through or crossover cable for wired connection.
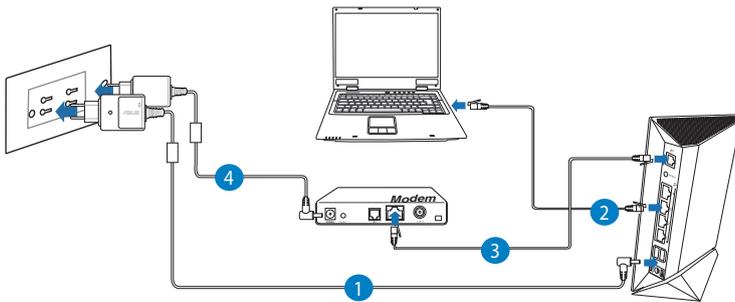
To set up your wireless router via wired connection:

1. Insert your wireless router's AC adapter to the DC-In port and plug it to a power outlet.

2. Using the bundled network cable, connect your computer to your wireless router's LAN port.

IMPORTANT! Ensure that the LAN LED is blinking.

3   Using another network cable, connect your modem to your wireless router's WAN port.

4. Insert your modem's AC adapter to the DC-In port and plug it to a power outlet.

Wireless connection
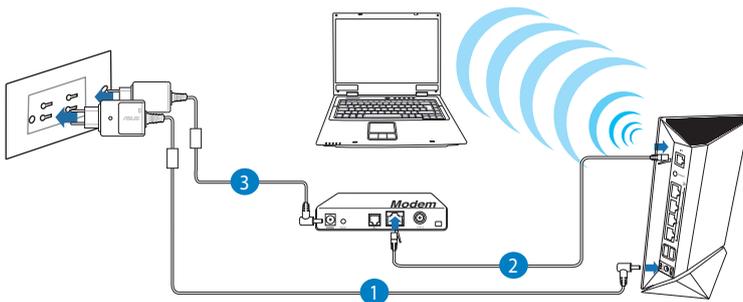
To set up your wireless router via wired connection:

1. Insert your wireless router's AC adapter to the DC-In port and plug it to a power outlet.

2   Using the bundled network cable, connect your modem to your wireless router's WAN port.

3. Insert your modem's AC adapter to the DC-In port and plug it to a power outlet.

4. Install an IEEE 802.11a/b/g/n WLAN adapter on your computer.

Before you proceed

NOTE: Before configuring your wireless router, do the steps described in this section for your host computer and network clients.

A.   Disable the proxy server, if enabled.

Windows® 7

1. Click Start > Internet Explorer to launch the browser.

2. Click Tools > Internet options > Connections tab > LAN settings.
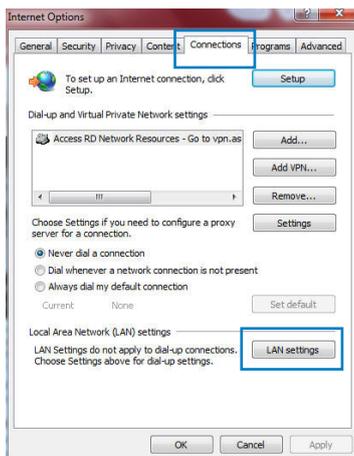
3. From the Local Area Network (LAN) Settings screen, untick Use a proxy server for your LAN.

4. Click OK when done.
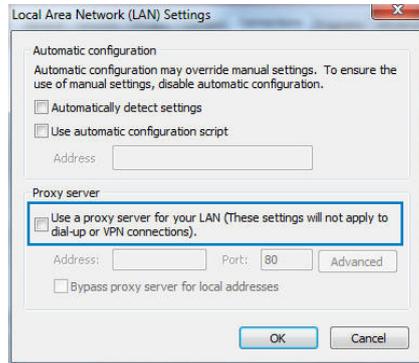
MAC OS

1. From your Safari browser, click Safari > Preferences > Advanced > Change Settings...

2. From the Network screen, deselect FTP Proxy and Web Proxy (HTTP).

3. Cllick Apply Now when done.
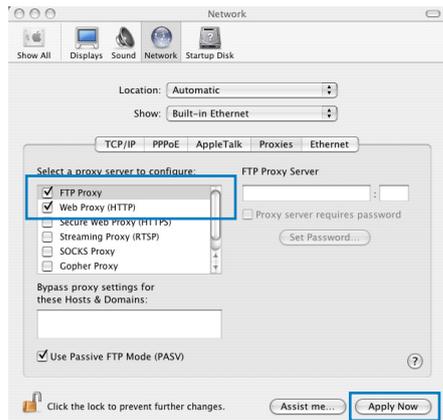
NOTE: Refer to your browser's help feature for details on disabling the proxy server.

B. Set the TCP/IP settings to automatically obtain an IP address.

Windows® 7

1. Click Start > Control Panel > Network and Internet > Network and Sharing Center > Manage network connections.

2. Select Internet Protocol Version 4 (TCP/IPv4) or Internet Protocol Version 6 (TCP/IPv6), then click Properties.
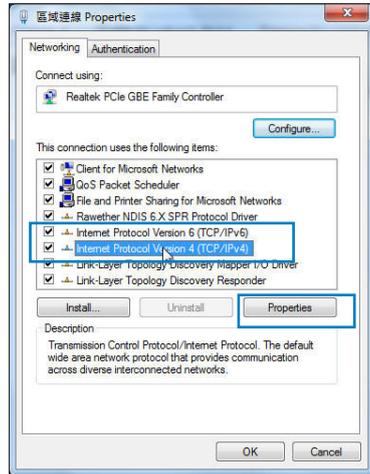
3. To obtain the iPv4 IP settings automatically, tick Obtain an IP address automatically.

   To obtain the iPv6 IP settings automatically, tick Obtain an IPv6 address automatically.

4. Click OK when done.
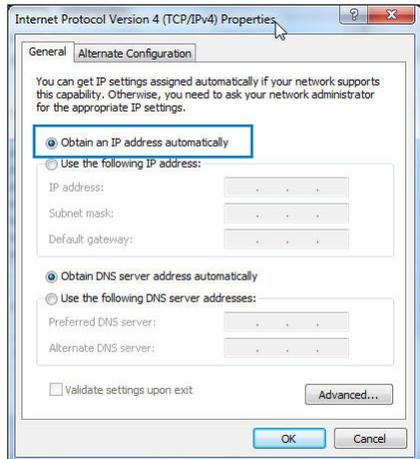
MAC OS

1. Click the Apple icon 🍎 located on the top left of your screen.

2. Click System Preferences > Network > Configure...

3. From the TCP/IP tab, select Using DHCP in the Configure IPv4 dropdown list.

4. Cllick Apply Now when done.
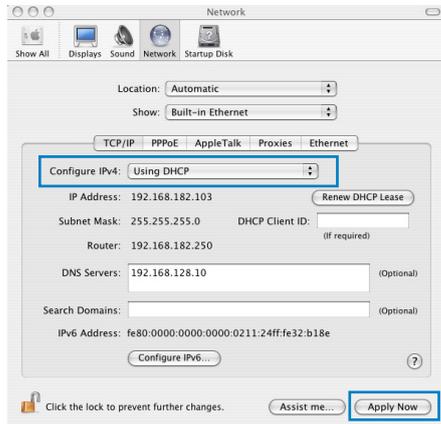
✍ **NOTE:** Refer to your operating system's help and support feature for details on configuring your computer's TCP/IP settings.

C. Disable the dial-up connection, if enabled.

Windows® 7

1. Click Start > Internet Explorer to launch the browser.

2. Click Tools > Internet options > Connections tab.

3. Tick Never dial a connection.

4. Click OK when done.
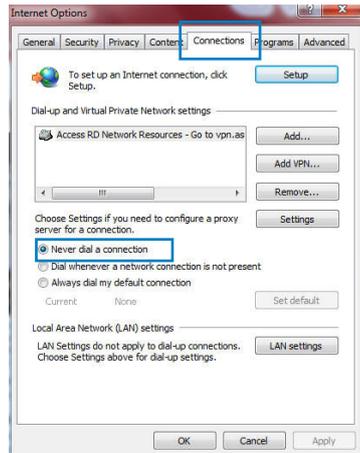
✍ **NOTE:** Refer to your browser's help feature for details on disabling the dial-up connection.

3   Configuring via the web GUI

Logging into the web GUI

Your ASUS Wireless Router comes with an intuitive web graphics user interface (GUI) that allows you to easily configure its various features through a web browser such as Internet Explorer, Firefox, Safari, or Google Chrome.

To log into the web GUI:

1. On your web browser such as Internet Explorer, Firefox, Safari, or Google Chrome, manually key in the wireless router's default IP address: **192.168.1.1**

2. On the login page, key in the default user name (**admin**) and password (**admin**).

NOTES:

• For your network clients, ensure that you set the TCP/IP settings to obtain IP addresses automatically, disable the proxy server settings, disable the dial-up settings, and cancel the dial-up connection.

• For more details, refer to the section **Before you proceed** in this user manual.

3. The wireless router's web GUI launches. Use the web GUI to configure various settings.

Setting up the Internet connection

![note icon] **NOTE**: When setting the Internet connection for the first time, press the Reset button on your wireless router to reset it to its factory default settings.

Quick Internet Setup (QIS) with auto-detection

The Quick Internet Setup (QIS) function guides you in quickly setting up your Internet connection.

To use QIS with auto-detection:

1. Launch a web browser such as Internet Explorer, Firefox, Safari, or Google Chrome.
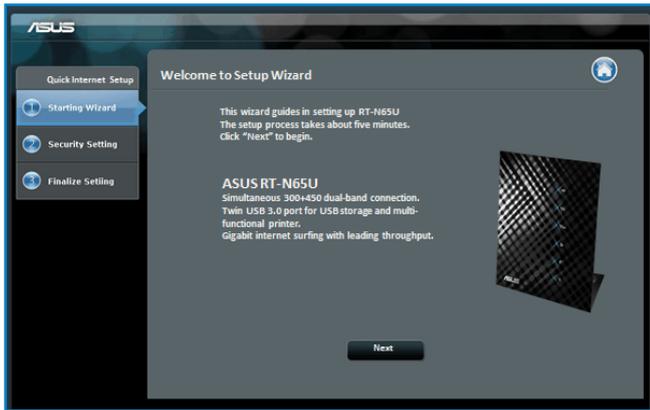
2. The wireless router automatically detects if your ISP connection type is **Dynamic IP**, **PPPoE**, **PPTP**, **L2TP**, and **Static IP**. Key in the necessary information for your ISP connection type.
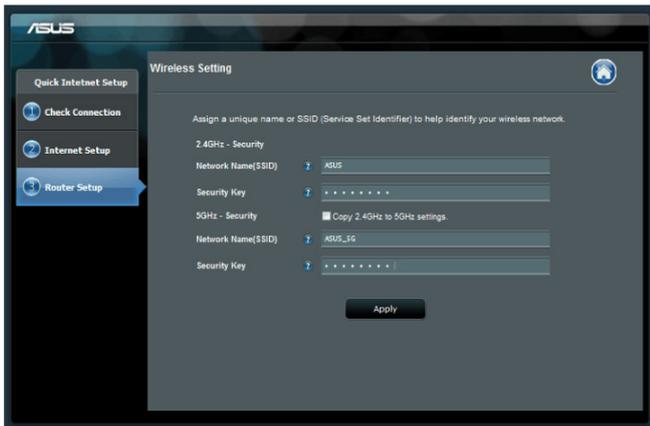
IMPORTANT! Obtain the necessary information about your Internet connection type from your ISP.

NOTES:

- The auto-detection of your ISP connection type takes place when you configure the wireless router for the first time or when your wireless router is reset to its default settings.

- If QIS failed to detect your Internet connection type, click **Skip to manual setting** and manually configure your connection settings.

- If QIS failed to launch automatically, manually launch your wireless router's web GUI to access the QIS page. To do this, follow these steps:

   - On your web browser, key in **http://192.168.1.1**

   - On the login page, key in the default username **admin** and password **admin**.

   - Click the **Quick Internet Setup** icon from the upper left corner of the Network Map page.

3. Assign the network name (SSID) and security key for your 2.4GHz and 5 GHz wireless connection. Click **Apply** when done.
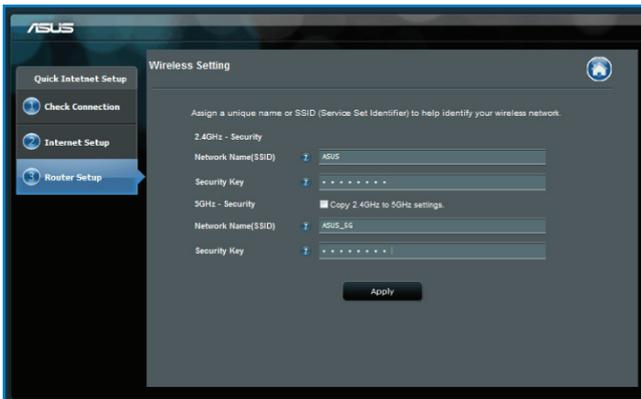
4. Your Internet and wireless settings are displayed. Click **Next** to continue.

5. Read the wireless network connection tutorial. When done, click **Finish**.
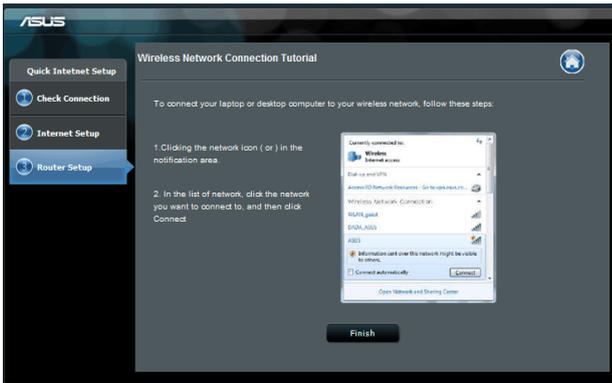
Setting up the wireless security settings

To protect your wireless network from unauthorized access, you need to configure its security settings.

To set up the wireless security settings:

1. Key in **192.168.1.1** on your web browser.

2. On the login screen, key in the default user name (**admin**) and password (**admin**), then click **OK**. The wireless router's web GUI launches.

3. On the Network Map screen, select the **System status** icon to display the wireless security settings such as SSID, security level, and encryption settings.

> **NOTE**:   You can set up different wireless security settings for 2.4GHz and 5GHz bands.

2.4GHz security settings

5GHz security settings

4. On the **Wireless name (SSID)** field, key in a unique name for your wireless network.

5. From the **Security Level** dropdown list, select the encryption method for your wireless network.

IMPORTANT!   The IEEE 802.11n standard prohibits using High Throughput with WEP or WPA-TKIP as the unicast cipher. If you use these encryption methods, your data rate will drop to IEEE 802.11g 54Mbps connection.

6. Key in your security passkey.

7. Click **Apply** when done.

Managing your network clients

To manage your network clients:

1. Launch the wireless router's web GUI.

2. On the Network Map screen, select the **Client Status** icon to display the information about your network clients.

Monitoring your USB device

The ASUS Wireless Router provides two USB 3.0 ports for connecting USB devices such as a USB storage device and USB printer, to allow you to monitor the working environment, share files, and printer with clients in your network.

> **NOTE:** To use this feature, you need to plug a USB storage device, such as a USB hard disk or USB flash drive, to the USB 3.0 port on the rear panel of your wireless router. Ensure that the USB storage device is formatted and partitioned properly. Refer to the Plug-n-Share Disk Support List at **http://event.asus.com/networks/disksupport**

> **IMPORTANT!** You first need to create a user account to allow other network clients to access the USB device. For more details, refer to the section **Using AiDisk for sharing files** in this user manual.

To monitor your USB device:

1. Launch the wireless router's web GUI.
2. On the Network Map screen, select the **USB Disk Status** icon to display the information about your USB device.

3. On the AiDisk Wizard field, click **GO** to set up an FTP server for Internet file sharing.

NOTES:

- For more details, refer to the section **Using the Network Place (Samba) Share service** and **Using the FTP Share service** in this user manual.

- On USB External HDD/Flash disk:

  - The wireless router works with most USB HDDs/Flash disks (up to 2TB size) and supports read-write access for FAT16, FAT32, EXT2, EXT3, and NTFS.

  - To safely remove the USB disk, launch the web GUI (http://192.168.1.1), then in the upper right corner of Network Map page click the USB icon > click **Eject USB1**.

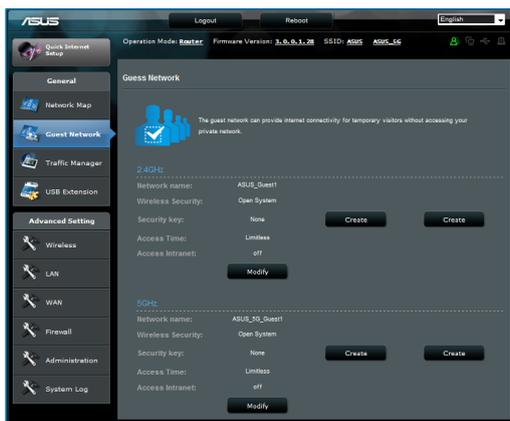 - Incorrect removal of the USB disk may cause data corruption.

Creating your Guest Network

The Guest Network provides Internet connectivity for temporary visitors without providing access to your private network.

To create your guest network:

1. Launch the wireless router's web GUI.

2. On the Guest Network screen, click **Create** to create a network for your visitors.

Using the Traffic Manager

Managing QoS (Quality of Service) Bandwidth

The Quality of Service (QoS) allows you to set the bandwidth priority and manage the network traffic.

To set up the bandwidth priority:

1. Launch the wireless router's web GUI.

2. On the Traffic Manager screen, select the **QoS** tab.

3. Click **ON** to enable the default rule and fill in the upload and download bandwidth fields.

![NOTE icon]

NOTE:

- Get the bandwidth information from your ISP.

- If you want to prioritize specific network applications and network devices, select your preferred priority from the User-defined QoS rules.
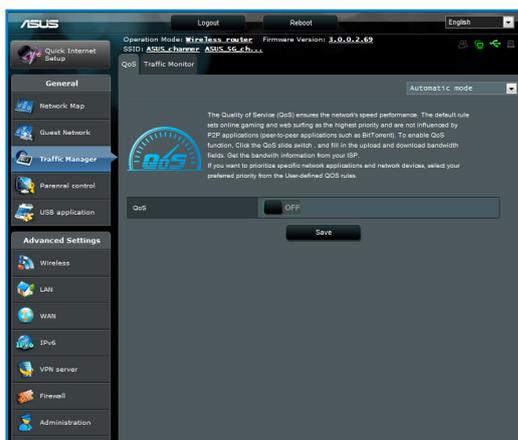
Monitoring Traffic

The traffic monitor function allows you to assess the bandwidth usage and speed of your Internet, LAN, Wired, WLAN (2.4GHz or 5GHz) connections.
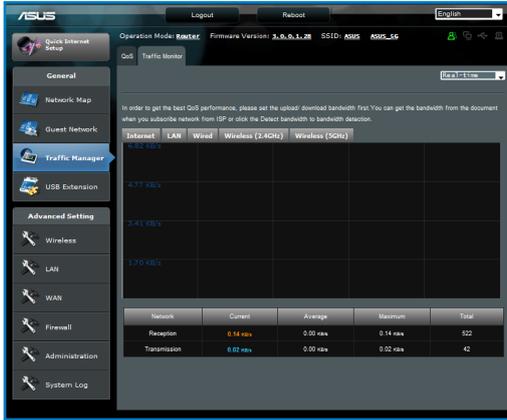
Using the USB Extension

The USB Extension function provides **AiDisk**, **Servers Center**, **Network Printer Server** and **Download Master** submenus.
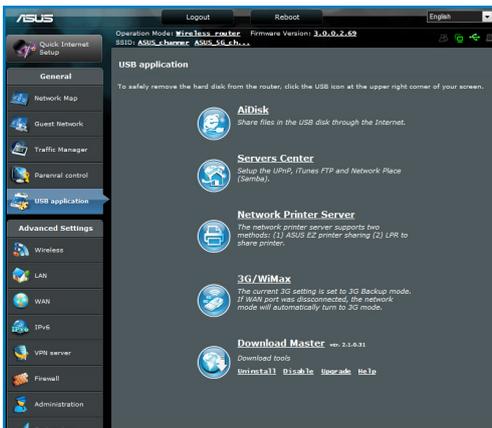
Using AiDisk for Files Sharing

AiDisk allows you to share files in the USB disk through the Internet.

> 📝 **NOTE:** Before using AiDisk, ensure that you have inserted a USB disk into the USB port of your wireless router.

To use AiDisk:

1. Click the **AiDisk** icon in USB Extension.
2. From the Welcome to AiDisk wizard screen, click **Go**.
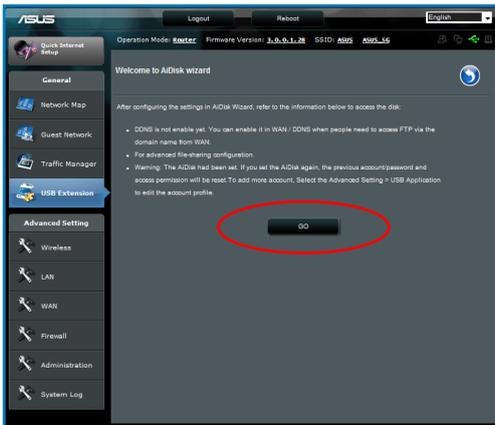
3. Select the access rights that you want to assign to the clients accessing your shared data.

4. Create your domain name via the ASUS DDNS services, select **I will use the service and accept the Terms of service** and key in your domain name. When done, click **Next**.
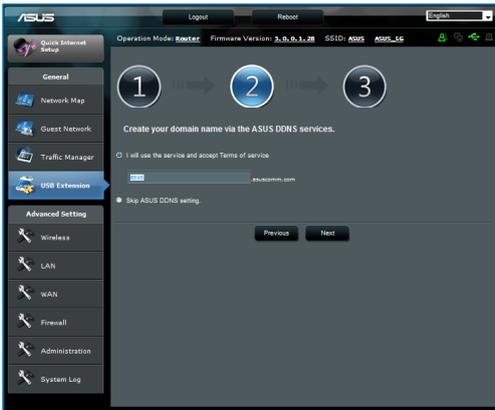
5. Click **Finish** to finish the setup.
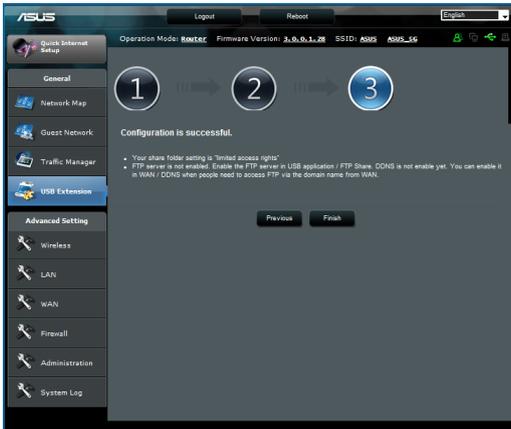
6. To access the FTP site that you created, launch a web browser or a third-party FTP client utility and key in the ftp link (**ftp://<domain name>**) you have previously created.

Using the Servers Center service

Your wireless router allows UPnP (Universal Plug and Play) multimedia devices, such as PS3 and XBox 360, to access multimedia files from the USB disk connected to your wireless router.

NOTE: Before using the UPnP Media Server function, install a wireless adapter on your UPnP device.

To use your router as a Servers center:

1. Click USB Extension from the navigation menu at the left side of your screen.

2. Select **Servers Center**. Your wireless router is now ready to share the media files stored in the USB disk.

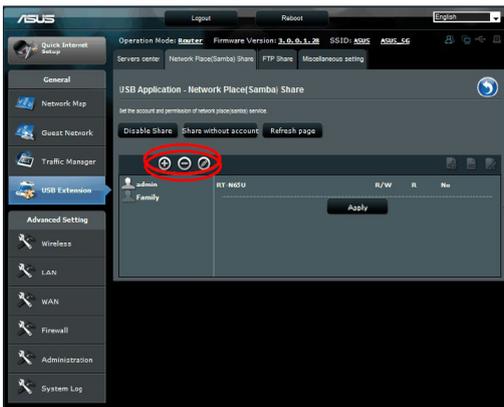## Using the Network Place (Samba) Share service

Network Place (Samba) Share allows you to set the account and permission for samba service.

To use Samba share:

1. Click the **Network place (Samba) Share** tab in the Servers Center of USB Extension.

2. Click **Add**, **Delete** or **Modify** to add, delete or modify the account. Click **Apply** when done.

Using the FTP Share service

Sharing files via the FTP server

The ASUS Wireless Router enables you to share files from your USB storage device via the FTP server with computers in LAN or through the Internet.

> **IMPORTANT**!   To use this feature, you need to insert a USB storage device, such as a USB hard disk or USB flash drive, to the USB3.0 port on the rear panel of your wireless router. Ensure that the USB storage device is formatted and partitioned properly. Refer to the ASUS website at **http://www.asus com** for the HD file system support table.

> **NOTE**:   Ensure that you safely remove the USB disk. Incorrect removal of the USB disk may cause data corruption.

To share files via the FTP server:

1. Ensure that you have set up your FTP server through AiDisk.

2. Enable the DDNS service for FTP server access. To do this, follow these steps:

   a. From the navigation menu, click **Advanced** > **WAN** > **DDNS** tab.

   b. In the **Enable the DDNS Client?** field, tick **Yes**.

   c. Key in your **User Name** or **E-mail Address** and **Password** or **DDNS key**.

   d. Key in your **Host name**. The format should be **xxx.asuscomm.com**, where xxx is your host name.

   e. When done, click **Apply**.

3. From the navigation menu, click **USB Extension** > **Servers Center** > **FTP Share** tab and select the account that you want to assign access rights to.
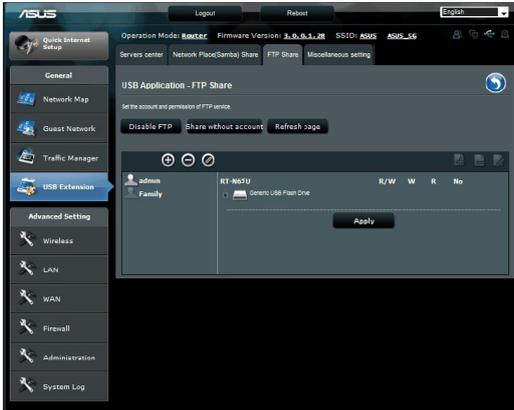
4. From the list of files/folders, select the type of access rights that you want to assign for specific files/folders:

    *   **R/W**: Select this option to assign read/write access for a specific file/folder.

    *   **W**: Select this option to assign write only access for a specific file/folder.

    *   **R**: Select this option to assign read only access for a specific file/folder.

    *   **No**: Select this option if you do not want to share a specific file/folder.

5. Click **Apply** to apply the changes.

6. To access the FTP server, key in the ftp link **ftp://<hostname>.asuscomm.com** and your user name and password on a web browser or a third-party FTP utility.

Using the Miscellaneous setting

Miscellaneous setting allows you to configure other settings for the USB disk, including maximum login user, device name, work group and language on FTP server.

To use miscellaneous setting:

1. Click the **Miscellaneous setting** tab in the Servers Center of USB Extension.

2. Follow the instruction to key in the necessary information.

3. When finish, click **Apply**.
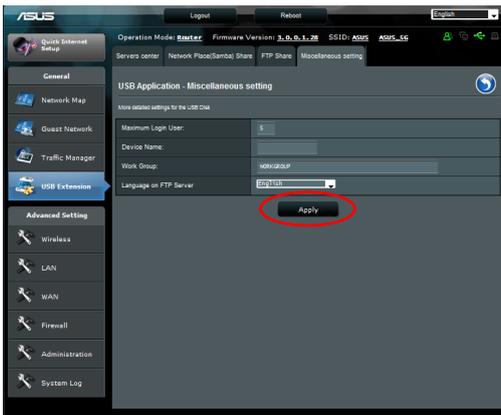
Configuring the Advanced settings

Advanced Setting allows you to configure the advanced features of your wireless router.

Setting up the DHCP Server

You may enable the **DHCP Server** function in your wireless router so your network clients can automatically obtain IP addresses from your wireless router.

NOTE: The ASUS Wireless Router can support up to 253 IP addresses for your network.

To set up the DHCP server:

1. Click **Advanced Setting** from the navigation menu at the left side of your screen.

2. Under the **LAN** menu, click **DHCP Server**.
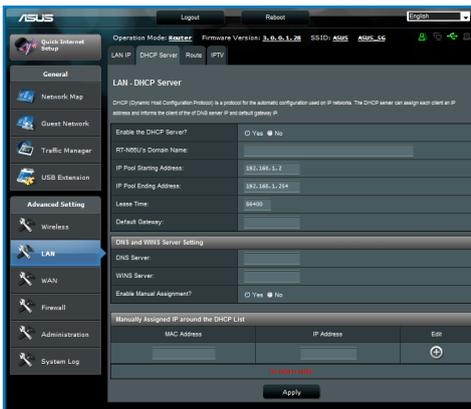
3. In the **Enable the DHCP Server?** field, tick **Yes**.

4. In the **IP Pool Starting Address** field, key in the starting IP address.

5. In the **IP Pool Ending Address** field, key in the ending IP address.

6. In the **Lease Time** field, key in the time that the IP addresses expire and the wireless router automatically assigns new IP Addresses for the network clients.

IMPORTANT!

-   For the IP Pool Starting and Ending IP addresses, we recommend that you use:

    -   **IP address**: 192.168.1.xxx (xxx can be any number between 2 and 254)

-   IP Pool Starting Address should not be greater than the IP Pool Ending Address.
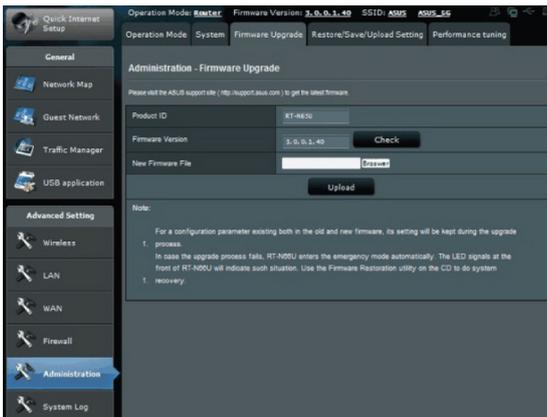
Upgrading the firmware

NOTE: Download the latest firmware from the ASUS website at **http://www.asus.com**

To upgrade the firmware:

1. Click **Advanced Setting** from the navigation menu at the left side of your screen.

2. Under the **Administration** menu, click **Firmware Upgrade**.

3. In the **New Firmware File** field, click **Browse** to locate the new firmware in your computer.

4. Click **Upload**. The uploading process takes about three minutes.


NOTE: If the upgrade process fails, the wireless router automatically enters the rescue mode and the power LED indicator at the front panel flashes slowly. To recover or restore the system, use the Firmware Restoration utility.

Restoring/Saving/Uploading settings

To restore/save/upload the settings:

1. Click **Advanced Setting** from the navigation menu at the left side of your screen.
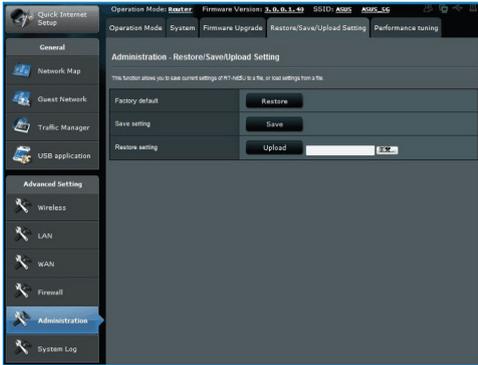
2. Under the Administration menu, click Restore/Save/Upload Setting.

3. Select the tasks that you want to do:

   • To restore to the default factory settings, click **Restore**, and click **OK** in the confirmation message.

   • To save the current system settings, click **Save**, and click **Save** in the file download window to save the system file in your preferred path.

   • To restore previous system settings, click **Browse** to locate the system file that you want to restore, then click **Upload**.

Setting up your network printer

Use the Network Printer Setup utility to set up a USB printer on your wireless router and allow network clients to access the USB printer.

NOTES:

- To check if your USB printer is compatible with your ASUS wireless router, refer to the Plug-n-Share Disk Support List at **http://event.asus.com/networks/disksupport**

- The wireless router's printer server function is not supported on Windows® 2000.

To set up your USB Printer:

1. Click USB Extension from the navigation menu at the left side of your screen, then click **Network Printer Server**.

2. Click **Download Now!** in the ASUS EZ printer sharing mode to download the network printer utility.
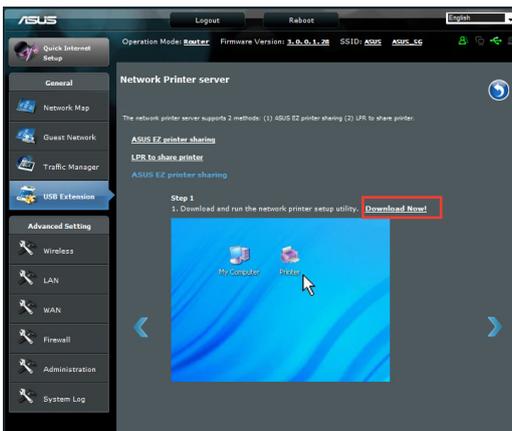
3. Unzip the downloaded file and click the Printer icon to run the network printer setup program.

4. Follow the onscreen instructions to set up your hardware, then click **Next**.
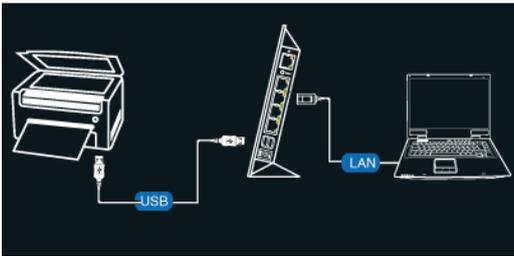
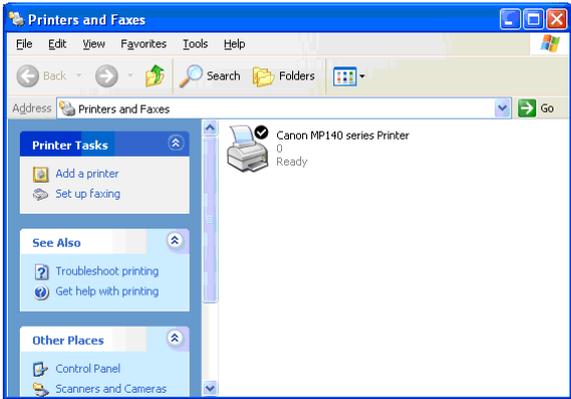5. Wait for a few minutes for the initial setup to finish. Click **Next**.

6. Click **Finish** to complete the installation.

7. Follow the Windows® OS instructions to install the printer driver.

8. After the printer's driver installation is completed, network clients can now use the printer.

4   Using the utilities

NOTES:

• Install the wireless router's utilities from the bundled support CD.

• If Autorun is disabled, run **setup.exe** from the root directory of the support CD.

Device Discovery

Device Discovery is an ASUS WLAN utility that detects an ASUS wireless router device, and enables you to configure the device.

To launch the Device Discovery utility:

• From your computer's desktop, click
Start > **All Programs** > **ASUS Utility** > **RT-N65U Wireless Router** > **Device Discovery**.
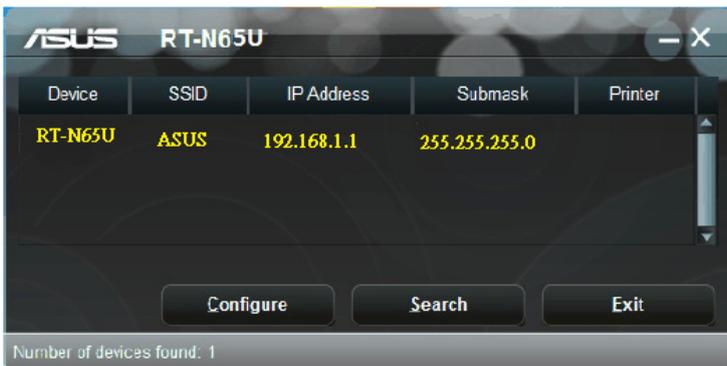
NOTE: When you set the router to Access Point mode, you need to use Device Discovery to get the router's IP address.

Firmware Restoration

Firmware Restoration is used on an ASUS Wireless Router that failed during its firmware upgrading process. It uploads the firmware that you specify. The process takes about three to four minutes.

IMPORTANT: Launch the rescue mode before using the Firmware Restoration utility.

To launch the rescue mode and use the Firmware Restoration utility:

1. Unplug the wireless router from the power source.

2. Hold the Reset button at the rear panel and simultaneously re-plug the wireless router into the power source. Release the Reset button when the Power LED at the front panel flashes slowly, which indicates that the wireless router is in the rescue mode.

3. Use the following to set up your TCP/IP settings:

   IP address: 192.168.1.x

   Subnet mask: 255.255.255.0

4. From your computer's desktop, click
   Start > **All Programs** > **ASUS Utility RT-N65U Wireless Router** > **Firmware Restoration**.
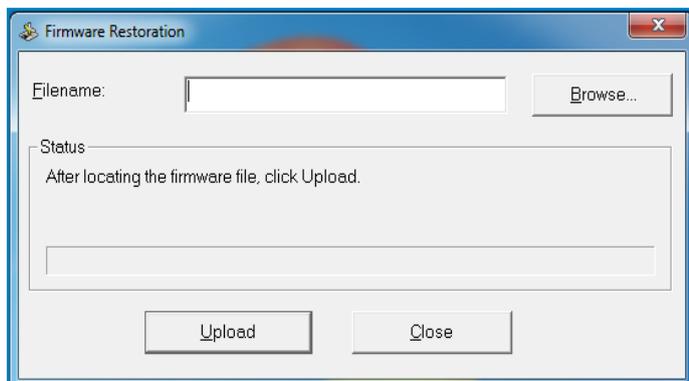
5. Specify a firmware file, then click **Upload**.

> **NOTE**: This is not a firmware upgrade utility and cannot be used on a working ASUS Wireless Router. Normal firmware upgrades must be done through the web interface. Refer to **Chapter 3: Configuring via the web GUI** for more details.