

Using the Web-Based Advanced User Interface

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Viewing the DHCP Client List Page

You can view a list of the computers (known as clients), which are connected to your network. You are able to view the IP address **(1)** of the computer, the host name **(2)** (if the computer has been assigned one), and the MAC address **(3)** of the computer's network interface card (NIC). Pressing the "Refresh" **(4)** button will update the list. If there have been any changes, the list will be updated.

(1) **(2)** **(3)**

LAN > DHCP Client List

This page shows you the IP address, Host Name and MAC address of each computer that is connected to your network. If the computer does not have a host name specified, then the Host Name field will be blank. Pressing "Refresh" will update the list.

IP Address	Host Name	MAC Address
192.168.2.2		00:0c:41:bb:32:4a
192.168.2.3		00:10:06:2e:25:5a
192.168.2.4	ProdImageSrv-2k	00:03:47:c2:c5:2f

(4) Refresh

Configuring the Wireless Network Settings

Your Belkin A+G Router is equipped with two wireless access points, one 802.11g and one 802.11a. Both access points run simultaneously (at the same time). Each has its own unique settings that can be adjusted independent of each other. This means that each will have its own SSID, Mode, Security, and Advanced settings. The following sections will tell you about making changes to these settings and more.

Disabling Wireless

In some cases, you may not want your wireless network ON. To disable the radio, place a check mark next to “Disable Super A Radio” or “Disable Super G Radio” then click “Apply Changes”. Keep in mind that the Super A and Super G settings are on separate pages.

Changing the Wireless Channel

There are a number of operating channels you can choose from with both 802.11g and 802.11a. Each have different numbered channels, but both work the same way. The channel can be changed if needed. If there are other wireless networks operating in your area, your network should be set to operate on a channel that is different than the other wireless networks.

Changing the Channel

For best performance, your Router should use a channel that is at least five channels away from the other wireless networks in the area. For instance, if another network is operating on channel 11, then set your network to channel 6 or below. To change the channel, select the channel from the drop-down list. Click “Apply Changes”. The change is immediate. Keep in mind that Super A and Super G settings are on different pages.

The screenshot shows the Belkin Cable/DSL Gateway Router Setup Utility web interface. The top navigation bar includes the Belkin logo, the title "Cable/DSL Gateway Router Setup Utility", and links for "Home", "Help", "Logout", and "Internet Status: connected".

The left sidebar contains a menu of configuration categories: LAN Setup, LAN Settings, DHCP Client List, Internet WAN, Connection Type, DNS, MAC Address, Wireless Super A, Channel and SSID, Security, Wireless Super G, Channel and SSID, Security, Firewall, Virtual Servers, Client IP Filters, DMZ, WAN Ping Blocking, Security Log, Utilities, Use as Access Point, Parental Control, Restart Router, Restore Factory Default, Save/Backup Settings, Restore Previous Settings, Firmware Update, and System Settings.

The main content area is titled "Wireless Super G > Channel and SSID". It contains the following settings:

- To make changes to the wireless settings of the router, make the changes here. Click "Apply Changes" to save the settings. [More Info](#)**
- Disable Super G Radio >**
- Wireless Channel >**
- SSID >**
- Wireless Mode >**
- Broadcast SSID >** [More Info](#)
- Advanced Settings >**
- Enable Super G Mode >** [More Info](#)
- Enable (XR) Mode >**
- Disable (AR) Mode >**
- Transmit Power >**
- Fragmentation Threshold >** (256 - 2346)
- CTS/RTS Threshold >** (256 - 2346)
- Preamble Mode >**
- DTIM >** (1 - 5)

At the bottom of the page are two buttons: "Clear Changes" and "Apply Changes".

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Changing the Wireless Network Name (SSID)

To identify your wireless network, a name called the SSID (Service Set Identifier) is used. The SSID is your network name. The default network name of the Routers access points are as follows:

802.11g AP: Belkin_Super_G

802.11a AP: Belkin_Super_A

You can change these to anything you choose, or you can leave them unchanged. Keep in mind, if you decide to change your wireless network name, and there are other wireless networks operating in your area, your network name needs to be different from other wireless networks that may be operating in your area. To change the SSID, type in the SSID that you want to use in the SSID field **(1)** and click “Apply Changes” **(2)**. The change is immediate. If you make a change to the SSID, your wireless-equipped computers may also need to be reconfigured to connect to your new network name. Refer to the documentation of your wireless network adapter for information on making this change.

The screenshot shows the Belkin Cable/DSL Gateway Router Setup Utility web interface. The left sidebar contains a navigation menu with categories: LAN Setup, Internet WAN, Wireless Super A, Security, Wireless Super G, Firewall, Virtual Servers, DMZ, WAN Ping Blocking, Security Log, Utilities, and System Settings. The main content area is titled "Wireless Super A > Channel and SSID". It includes a sub-header "Wireless Super A > Channel and SSID" and a note: "To make changes to the wireless settings of the router, make the changes here. Click 'Apply Changes' to save the settings. More Info". The configuration options are: "Disable Super A Radio" (checkbox), "Wireless Channel" (dropdown menu showing 36), "SSID" (text input field containing "Belkin Super A"), "Wireless Mode" (dropdown menu showing "a only"), "Broadcast SSID" (checkbox checked with "More Info" link), "Advanced Settings" section with "Enable Super A Mode" (checkbox checked), "Enable (XR) Mode" (checkbox checked), "Transmit Power" (dropdown menu showing "Max"), "Fragmentation Threshold" (input field showing 2346 with range (256 - 2346)), "CTS/RTS Threshold" (input field showing 2346 with range (256 - 2346)), and "DTIM" (input field showing 1 with range (1 - 5)). At the bottom are "Clear Changes" and "Apply Changes" buttons. Arrows labeled (1) and (2) point to the SSID input field and the "Apply Changes" button, respectively.

Using the Broadcast SSID Feature

Note: This advanced feature should be employed by advanced users only. For security, you can choose not to broadcast your network's SSID. Doing so will keep your network name hidden from computers that are scanning for the presence of wireless networks. To turn off the broadcast of the SSID, remove the check mark from the box next to "Broadcast SSID", and then click "Apply Changes". The change is immediate. Each computer now needs to be set to connect to your specific SSID; an SSID of "ANY" will no longer be accepted. Refer to the documentation of your wireless network adapter for information on making this change.

Super G Wireless Mode

The Super G wireless mode of the Router is shipped from the factory in the "g and b" mode, meaning it will seamlessly interoperate with 802.11b and 802.11g devices. Setting the Router's wireless mode to b only will allow only 802.11b devices to connect to the network. Setting the wireless mode to "Auto 108Mbps" will allow the Router to jump into the 108Mbps mode when possible. In this mode the Router constantly monitors the radio waves looking for interference or other networks. If neither of these is detected, the Router will jump into 108Mbps mode and remain there unless interference or another network is detected. "108Mbps only" mode will lock the Router into the 108Mbps mode. This mode is only recommended if there are absolutely no other 802.11g networks or interference in the space where you are operating your network. Interference can greatly and adversely affect the performance of the Router when locked into 108Mbps mode. To change the wireless mode, select the mode you want from the drop-down menu and click "Apply Changes".

Super Mode

Enabling Super mode will allow you to take advantage of the dynamic 108Mbps capability, real-time hardware data compression, dynamic transmit optimization and standards-compliant bursting. Setting the wireless mode to "Auto 108Mbps" and enabling Super mode will allow the Router to jump into Super mode when possible. The Router constantly monitors the radio waves looking for interference or other networks. If neither of these is detected, the Router will jump into Super mode and remain there unless interference or another network is detected. The Super mode is turned OFF at the factory. To enable Super mode, check the check box and click "Apply Changes".

Super A Wireless Mode

The Super A wireless mode of the Router is shipped from the factory in the “a only” mode, meaning it will seamlessly interoperate with standard 802.11a devices. Setting the wireless mode to “Auto 108Mbps” will allow the Router to jump into the 108Mbps mode when possible. In this mode, the Router constantly monitors the radio waves looking for interference or other networks. If neither of these are detected, the Router will jump into 108Mbps mode and remain there unless interference or another network is detected. “108Mbps only” mode will lock the Router into the 108Mbps mode. This mode is only recommended if there are absolutely no other 802.11a networks or interference in the space where you are operating your network. Interference can greatly and adversely affect the performance of the Router when locked into 108Mbps mode. To change the wireless mode, select the mode you want from the drop-down menu and click “Apply Changes”.

Enable XR Mode

XR mode allows for extension of the operating range of the Router. By allowing devices to connect at lower than 1Mbps rates when the signal is weak (when the device is far from the Router), the connection can be maintained at much greater distances than normal. The Router ships from the factory with the XR mode ON. Unchecking the check box and clicking “Apply Changes” will disable the XR mode.

Disable AR Mode

AR mode, or Adaptive Radio mode, works only when the Router is in “Auto 108Mbps” wireless mode. AR uses a method by which the Router constantly monitors the radio waves looking for interference or other networks. If neither of these are detected, the Router will jump into 108Mbps mode and remain there unless interference or another network is detected. “108Mbps only” mode will lock the Router into the 108Mbps mode. Disabling the AR mode is generally not recommended unless there are absolutely no other networks or interference in the space where you are operating your network. Interference can greatly and adversely affect the performance of the Router in 108Mbps mode. AR mode is turned on at the factory. Checking the check box and clicking “Apply Changes” will disable the AR mode.

Transmit Power

The Super A+G technology used in your Router has great capabilities to reach farther than standard 802.11g or 802.11a technology. In some cases, the coverage area of the Router may exceed the area that you intend to cover. If so, you can reduce the power output of

the Router, effectively reducing the coverage area. If you are in a small space such as an apartment, you can reduce the coverage area to eliminate the possibility of neighbors using your network or the possibility of your network interfering with a neighboring network. The Transmit Power setting has been set to “Max” (Maximum) at the factory. To change the Transmit Power setting, select the power setting you want from the drop-down menu and click “Apply Changes”.

Changing the Wireless Security Settings

Your Router is equipped with the latest security standard called WPA (Wi-Fi® Protected Access). It also supports the legacy security standard called WEP (Wired Equivalent Privacy). Also included is 802.1x authentication using a server. By default, wireless security is disabled. To enable security, you will need to determine which standard you want to use. To access the security settings, click “Security” under each wireless (Super G and Super A) heading. Please note, security for Super A and Super G are separate. The security settings can be set the same or differently depending on what you want. To fully secure your wireless network, you will need to secure both the Super A and the Super G network.

Setting WPA-PSK (No Server) Security

Note: To use WPA security, your clients must be capable of supporting WPA. If you are not sure, contact the manufacturer of your wireless card.

WPA-PSK uses what is known as a pre-shared key (PSK) as the security key. A pre-shared key is basically a password that is between eight and 40 characters long. It can be a combination of letters, numbers, or characters. Each client uses the same key to access the network. Typically this is the model that will be used in a home environment. It is recommended by the Wi-Fi Alliance that your key be at least 20 characters long and use a mixture of letters, numbers, and special characters (such as !, ", (,)). Try to make it easy to remember, like "tH15is@600d9@ssW0rD" (thisisagoodpassword).

Note: These directions work for both Super A and Super G security.

1. From the "Security Mode" drop-down menu, select "WPA-PSK (no server)".
2. For "Encryption Technique", select TKIP or AES. This setting will have to be identical on the clients that you set up.
3. Enter your pre-shared key. This can be from eight to 40 characters and can be letters, numbers, or symbols. This same key must be used on all of the clients that you set up.
4. Click "Apply Changes" to finish. You must now set all clients to match these settings.

The screenshot shows a configuration form for WPA-PSK (no server) security. It includes the following elements:

- Security Mode:** A dropdown menu set to "WPA-PSK (no server)".
- Encryption Technique:** A dropdown menu set to "TKIP" with the text "Default is TKIP" next to it.
- Pre-shared Key (PSK):** A text input field containing a masked key "XXXXXXXXXX".
- WPA-PSK (no server) description:** A block of text explaining that the key is a password between 8 and 63 characters long, including spaces and symbols, and that all clients must use the same key. It includes a "More Info" link.
- Obscure PSK:** A checkbox that is checked.
- Action Buttons:** Two buttons at the bottom: "Clear Changes" and "Apply Changes".

Setting WPA (with server) Security

If your network uses a radius server to distribute keys to the clients, use this setting.

1. From the “Security Mode” drop-down menu, select “WPA (with server)”.
2. For “Encryption Technique”, select TKIP or AES. This setting will have to be identical on the clients that you set up.
3. Enter the IP address of the radius server into the “Radius Server” fields.
4. Enter the radius key into the “Radius Key” field.
5. Enter the key interval. Key interval is how often the keys are distributed (in packets).
6. Click “Apply Changes” to finish. You must now set all clients to match these settings.

The screenshot shows a configuration form for WPA (with server) security. At the top, the "Security Mode" is set to "WPA (with Radius Server)". Below this, a sub-header "WPA (with server)" is followed by a description: "Advanced Setting - Wi-Fi Protected Access using a server to distribute keys to the clients: This option requires that a Radius server is running on the network." and a link for "More Info".

The form includes the following fields and controls:

- Encryption Technique:** A dropdown menu currently set to "TKIP".
- Radius Server:** Four input fields for IP address, each containing a "0".
- Radius Port:** An input field containing "1812".
- Radius Key:** An empty text input field.
- Re-Key Interval:** An input field containing "0" followed by "(seconds)".
- Obscure Key:** A checked checkbox.
- Buttons:** "Clear Changes" and "Apply Changes" buttons at the bottom.

Setting WEP Encryption (64-bit, 128-bit)

Note to Mac users: The passphrase option will not operate with Apple® AirPort®. To configure encryption for your Mac computer, set the encryption using the manual method described in the next section.

1. Select “128-bit WEP” or “64-bit WEP” from the drop-down menu.

The screenshot shows a web-based configuration interface for WEP encryption. At the top, a dropdown menu is set to "128bitWEP". Below it is a grid of 13 empty boxes for entering a hex key, with the text "(13 hex digit pairs)" underneath. A note states: "NOTE: To automatically generate hex pairs using a PassPhrase, input it here". Below the note is a "PassPhrase" input field and a "generate" button. There is a checked checkbox for "Obscure Key". At the bottom are "Clear Changes" and "Apply Changes" buttons.

2. After selecting your WEP encryption mode, you can enter your WEP key manually by typing in the hex WEP key manually, or you can type in a passphrase in the “Passphrase” field and click “Generate” to create a WEP key from the passphrase. Click “Apply Changes” to finish. You must now set all of your clients to match these settings. Note on passphrases: The passphrase generation technique works with all Belkin wireless clients. It is not guaranteed to work with other brands of wireless clients. If you are using a mix of Belkin and other brands of products, it is recommended that you use a hex key. For more information on hex keys, see page 51 in this User Manual.

The screenshot shows the "802.11a Wireless > Security" configuration page in a Belkin web interface. The "Security Mode" dropdown is set to "128bitWEP". The key input field and "generate" button are visible. The "Obscure Key" checkbox is unchecked. The interface includes a left-hand navigation menu with options like "Link Setup", "LAN Settings", "DHCP Client List", "Connection Type", "IP", "MAC Address", "Wireless Mode B", "Channel and SSID", "Security", "Wireless Mode G", "Wireless Mode N", "Wireless Mode A", "Wireless Mode S", "Wireless Mode T", "Wireless Mode U", "Wireless Mode V", "Wireless Mode W", "Wireless Mode X", "Wireless Mode Y", "Wireless Mode Z", "Wireless Mode AA", "Wireless Mode AB", "Wireless Mode AC", "Wireless Mode AD", "Wireless Mode AE", "Wireless Mode AF", "Wireless Mode AG", "Wireless Mode AH", "Wireless Mode AI", "Wireless Mode AJ", "Wireless Mode AK", "Wireless Mode AL", "Wireless Mode AM", "Wireless Mode AN", "Wireless Mode AO", "Wireless Mode AP", "Wireless Mode AQ", "Wireless Mode AR", "Wireless Mode AS", "Wireless Mode AT", "Wireless Mode AU", "Wireless Mode AV", "Wireless Mode AW", "Wireless Mode AX", "Wireless Mode AY", "Wireless Mode AZ", "Wireless Mode BA", "Wireless Mode BB", "Wireless Mode BC", "Wireless Mode BD", "Wireless Mode BE", "Wireless Mode BF", "Wireless Mode BG", "Wireless Mode BH", "Wireless Mode BI", "Wireless Mode BJ", "Wireless Mode BK", "Wireless Mode BL", "Wireless Mode BM", "Wireless Mode BN", "Wireless Mode BO", "Wireless Mode BP", "Wireless Mode BQ", "Wireless Mode BR", "Wireless Mode BS", "Wireless Mode BT", "Wireless Mode BU", "Wireless Mode BV", "Wireless Mode BW", "Wireless Mode BX", "Wireless Mode BY", "Wireless Mode BZ", "Wireless Mode CA", "Wireless Mode CB", "Wireless Mode CC", "Wireless Mode CD", "Wireless Mode CE", "Wireless Mode CF", "Wireless Mode CG", "Wireless Mode CH", "Wireless Mode CI", "Wireless Mode CJ", "Wireless Mode CK", "Wireless Mode CL", "Wireless Mode CM", "Wireless Mode CN", "Wireless Mode CO", "Wireless Mode CP", "Wireless Mode CQ", "Wireless Mode CR", "Wireless Mode CS", "Wireless Mode CT", "Wireless Mode CU", "Wireless Mode CV", "Wireless Mode CW", "Wireless Mode CX", "Wireless Mode CY", "Wireless Mode CZ", "Wireless Mode DA", "Wireless Mode DB", "Wireless Mode DC", "Wireless Mode DD", "Wireless Mode DE", "Wireless Mode DF", "Wireless Mode DG", "Wireless Mode DH", "Wireless Mode DI", "Wireless Mode DJ", "Wireless Mode DK", "Wireless Mode DL", "Wireless Mode DM", "Wireless Mode DN", "Wireless Mode DO", "Wireless Mode DP", "Wireless Mode DQ", "Wireless Mode DR", "Wireless Mode DS", "Wireless Mode DT", "Wireless Mode DU", "Wireless Mode DV", "Wireless Mode DW", "Wireless Mode DX", "Wireless Mode DY", "Wireless Mode DZ", "Wireless Mode EA", "Wireless Mode EB", "Wireless Mode EC", "Wireless Mode ED", "Wireless Mode EE", "Wireless Mode EF", "Wireless Mode EG", "Wireless Mode EH", "Wireless Mode EI", "Wireless Mode EJ", "Wireless Mode EK", "Wireless Mode EL", "Wireless Mode EM", "Wireless Mode EN", "Wireless Mode EO", "Wireless Mode EP", "Wireless Mode EQ", "Wireless Mode ER", "Wireless Mode ES", "Wireless Mode ET", "Wireless Mode EU", "Wireless Mode EV", "Wireless Mode EW", "Wireless Mode EX", "Wireless Mode EY", "Wireless Mode EZ", "Wireless Mode FA", "Wireless Mode FB", "Wireless Mode FC", "Wireless Mode FD", "Wireless Mode FE", "Wireless Mode FF", "Wireless Mode FG", "Wireless Mode FH", "Wireless Mode FI", "Wireless Mode FJ", "Wireless Mode FK", "Wireless Mode FL", "Wireless Mode FM", "Wireless Mode FN", "Wireless Mode FO", "Wireless Mode FP", "Wireless Mode FQ", "Wireless Mode FR", "Wireless Mode FS", "Wireless Mode FT", "Wireless Mode FU", "Wireless Mode FV", "Wireless Mode FW", "Wireless Mode FX", "Wireless Mode FY", "Wireless Mode FZ", "Wireless Mode GA", "Wireless Mode GB", "Wireless Mode GC", "Wireless Mode GD", "Wireless Mode GE", "Wireless Mode GF", "Wireless Mode GG", "Wireless Mode GH", "Wireless Mode GI", "Wireless Mode GJ", "Wireless Mode GK", "Wireless Mode GL", "Wireless Mode GM", "Wireless Mode GN", "Wireless Mode GO", "Wireless Mode GP", "Wireless Mode GQ", "Wireless Mode GR", "Wireless Mode GS", "Wireless Mode GT", "Wireless Mode GU", "Wireless Mode GV", "Wireless Mode GW", "Wireless Mode GX", "Wireless Mode GY", "Wireless Mode GZ", "Wireless Mode HA", "Wireless Mode HB", "Wireless Mode HC", "Wireless Mode HD", "Wireless Mode HE", "Wireless Mode HF", "Wireless Mode HG", "Wireless Mode HH", "Wireless Mode HI", "Wireless Mode HJ", "Wireless Mode HK", "Wireless Mode HL", "Wireless Mode HM", "Wireless Mode HN", "Wireless Mode HO", "Wireless Mode HP", "Wireless Mode HQ", "Wireless Mode HR", "Wireless Mode HS", "Wireless Mode HT", "Wireless Mode HU", "Wireless Mode HV", "Wireless Mode HW", "Wireless Mode HX", "Wireless Mode HY", "Wireless Mode HZ", "Wireless Mode IA", "Wireless Mode IB", "Wireless Mode IC", "Wireless Mode ID", "Wireless Mode IE", "Wireless Mode IF", "Wireless Mode IG", "Wireless Mode IH", "Wireless Mode II", "Wireless Mode IJ", "Wireless Mode IK", "Wireless Mode IL", "Wireless Mode IM", "Wireless Mode IN", "Wireless Mode IO", "Wireless Mode IP", "Wireless Mode IQ", "Wireless Mode IR", "Wireless Mode IS", "Wireless Mode IT", "Wireless Mode IU", "Wireless Mode IV", "Wireless Mode IW", "Wireless Mode IX", "Wireless Mode IY", "Wireless Mode IZ", "Wireless Mode JA", "Wireless Mode JB", "Wireless Mode JC", "Wireless Mode JD", "Wireless Mode JE", "Wireless Mode JF", "Wireless Mode JG", "Wireless Mode JH", "Wireless Mode JI", "Wireless Mode JJ", "Wireless Mode JK", "Wireless Mode JL", "Wireless Mode JM", "Wireless Mode JN", "Wireless Mode JO", "Wireless Mode JP", "Wireless Mode JQ", "Wireless Mode JR", "Wireless Mode JS", "Wireless Mode JT", "Wireless Mode JU", "Wireless Mode JV", "Wireless Mode JW", "Wireless Mode JX", "Wireless Mode JY", "Wireless Mode JZ", "Wireless Mode KA", "Wireless Mode KB", "Wireless Mode KC", "Wireless Mode KD", "Wireless Mode KE", "Wireless Mode KF", "Wireless Mode KG", "Wireless Mode KH", "Wireless Mode KI", "Wireless Mode KJ", "Wireless Mode KK", "Wireless Mode KL", "Wireless Mode KM", "Wireless Mode KN", "Wireless Mode KO", "Wireless Mode KP", "Wireless Mode KQ", "Wireless Mode KR", "Wireless Mode KS", "Wireless Mode KT", "Wireless Mode KU", "Wireless Mode KV", "Wireless Mode KW", "Wireless Mode KX", "Wireless Mode KY", "Wireless Mode KZ", "Wireless Mode LA", "Wireless Mode LB", "Wireless Mode LC", "Wireless Mode LD", "Wireless Mode LE", "Wireless Mode LF", "Wireless Mode LG", "Wireless Mode LH", "Wireless Mode LI", "Wireless Mode LJ", "Wireless Mode LK", "Wireless Mode LL", "Wireless Mode LM", "Wireless Mode LN", "Wireless Mode LO", "Wireless Mode LP", "Wireless Mode LQ", "Wireless Mode LR", "Wireless Mode LS", "Wireless Mode LT", "Wireless Mode LU", "Wireless Mode LV", "Wireless Mode LW", "Wireless Mode LX", "Wireless Mode LY", "Wireless Mode LZ", "Wireless Mode MA", "Wireless Mode MB", "Wireless Mode MC", "Wireless Mode MD", "Wireless Mode ME", "Wireless Mode MF", "Wireless Mode MG", "Wireless Mode MH", "Wireless Mode MI", "Wireless Mode MJ", "Wireless Mode MK", "Wireless Mode ML", "Wireless Mode MM", "Wireless Mode MN", "Wireless Mode MO", "Wireless Mode MP", "Wireless Mode MQ", "Wireless Mode MR", "Wireless Mode MS", "Wireless Mode MT", "Wireless Mode MU", "Wireless Mode MV", "Wireless Mode MW", "Wireless Mode MX", "Wireless Mode MY", "Wireless Mode MZ", "Wireless Mode NA", "Wireless Mode NB", "Wireless Mode NC", "Wireless Mode ND", "Wireless Mode NE", "Wireless Mode NF", "Wireless Mode NG", "Wireless Mode NH", "Wireless Mode NI", "Wireless Mode NJ", "Wireless Mode NK", "Wireless Mode NL", "Wireless Mode NM", "Wireless Mode NN", "Wireless Mode NO", "Wireless Mode NP", "Wireless Mode NQ", "Wireless Mode NR", "Wireless Mode NS", "Wireless Mode NT", "Wireless Mode NU", "Wireless Mode NV", "Wireless Mode NW", "Wireless Mode NX", "Wireless Mode NY", "Wireless Mode NZ", "Wireless Mode OA", "Wireless Mode OB", "Wireless Mode OC", "Wireless Mode OD", "Wireless Mode OE", "Wireless Mode OF", "Wireless Mode OG", "Wireless Mode OH", "Wireless Mode OI", "Wireless Mode OJ", "Wireless Mode OK", "Wireless Mode OL", "Wireless Mode OM", "Wireless Mode ON", "Wireless Mode OO", "Wireless Mode OP", "Wireless Mode OQ", "Wireless Mode OR", "Wireless Mode OS", "Wireless Mode OT", "Wireless Mode OU", "Wireless Mode OV", "Wireless Mode OW", "Wireless Mode OX", "Wireless Mode OY", "Wireless Mode OZ", "Wireless Mode PA", "Wireless Mode PB", "Wireless Mode PC", "Wireless Mode PD", "Wireless Mode PE", "Wireless Mode PF", "Wireless Mode PG", "Wireless Mode PH", "Wireless Mode PI", "Wireless Mode PJ", "Wireless Mode PK", "Wireless Mode PL", "Wireless Mode PM", "Wireless Mode PN", "Wireless Mode PO", "Wireless Mode PP", "Wireless Mode PQ", "Wireless Mode PR", "Wireless Mode PS", "Wireless Mode PT", "Wireless Mode PU", "Wireless Mode PV", "Wireless Mode PW", "Wireless Mode PX", "Wireless Mode PY", "Wireless Mode PZ", "Wireless Mode QA", "Wireless Mode QB", "Wireless Mode QC", "Wireless Mode QD", "Wireless Mode QE", "Wireless Mode QF", "Wireless Mode QG", "Wireless Mode QH", "Wireless Mode QI", "Wireless Mode QJ", "Wireless Mode QK", "Wireless Mode QL", "Wireless Mode QM", "Wireless Mode QN", "Wireless Mode QO", "Wireless ModeQP", "Wireless Mode QQ", "Wireless Mode QR", "Wireless Mode QS", "Wireless Mode QT", "Wireless Mode QU", "Wireless Mode QV", "Wireless Mode QW", "Wireless Mode QX", "Wireless Mode QY", "Wireless Mode QZ", "Wireless Mode RA", "Wireless Mode RB", "Wireless Mode RC", "Wireless Mode RD", "Wireless Mode RE", "Wireless Mode RF", "Wireless Mode RG", "Wireless Mode RH", "Wireless Mode RI", "Wireless Mode RJ", "Wireless Mode RK", "Wireless Mode RL", "Wireless Mode RM", "Wireless Mode RN", "Wireless Mode RO", "Wireless Mode RP", "Wireless Mode RQ", "Wireless Mode RR", "Wireless Mode RS", "Wireless Mode RT", "Wireless Mode RU", "Wireless Mode RV", "Wireless Mode RW", "Wireless Mode RX", "Wireless Mode RY", "Wireless Mode RZ", "Wireless Mode SA", "Wireless Mode SB", "Wireless Mode SC", "Wireless Mode SD", "Wireless Mode SE", "Wireless Mode SF", "Wireless Mode SG", "Wireless Mode SH", "Wireless Mode SI", "Wireless Mode SJ", "Wireless Mode SK", "Wireless Mode SL", "Wireless Mode SM", "Wireless Mode SN", "Wireless Mode SO", "Wireless Mode SP", "Wireless Mode SQ", "Wireless Mode SR", "Wireless Mode SS", "Wireless Mode ST", "Wireless Mode SU", "Wireless Mode SV", "Wireless Mode SW", "Wireless Mode SX", "Wireless Mode SY", "Wireless Mode SZ", "Wireless Mode TA", "Wireless Mode TB", "Wireless Mode TC", "Wireless Mode TD", "Wireless Mode TE", "Wireless Mode TF", "Wireless Mode TG", "Wireless Mode TH", "Wireless Mode TI", "Wireless Mode TJ", "Wireless Mode TK", "Wireless Mode TL", "Wireless Mode TM", "Wireless Mode TN", "Wireless Mode TO", "Wireless Mode TP", "Wireless Mode TQ", "Wireless Mode TR", "Wireless Mode TS", "Wireless Mode TT", "Wireless Mode TU", "Wireless Mode TV", "Wireless Mode TW", "Wireless Mode TX", "Wireless Mode TY", "Wireless Mode TZ", "Wireless Mode UA", "Wireless Mode UB", "Wireless Mode UC", "Wireless Mode UD", "Wireless Mode UE", "Wireless Mode UF", "Wireless Mode UG", "Wireless Mode UH", "Wireless Mode UI", "Wireless Mode UJ", "Wireless Mode UK", "Wireless Mode UL", "Wireless Mode UM", "Wireless Mode UN", "Wireless Mode UO", "Wireless Mode UP", "Wireless Mode UQ", "Wireless Mode UR", "Wireless Mode US", "Wireless Mode UT", "Wireless Mode UY", "Wireless Mode UZ", "Wireless Mode VA", "Wireless Mode VB", "Wireless Mode VC", "Wireless Mode VD", "Wireless Mode VE", "Wireless Mode VF", "Wireless Mode VG", "Wireless Mode VH", "Wireless Mode VI", "Wireless Mode VJ", "Wireless Mode VK", "Wireless Mode VL", "Wireless Mode VM", "Wireless Mode VN", "Wireless Mode VO", "Wireless Mode VP", "Wireless Mode VQ", "Wireless Mode VR", "Wireless Mode VS", "Wireless Mode VT", "Wireless Mode VU", "Wireless Mode VV", "Wireless Mode VW", "Wireless Mode VX", "Wireless Mode VY", "Wireless Mode VZ", "Wireless Mode WA", "Wireless Mode WB", "Wireless Mode WC", "Wireless Mode WD", "Wireless Mode WE", "Wireless Mode WF", "Wireless Mode WG", "Wireless Mode WH", "Wireless Mode WI", "Wireless Mode WJ", "Wireless Mode WK", "Wireless Mode WL", "Wireless Mode WM", "Wireless Mode WN", "Wireless Mode WO", "Wireless Mode WP", "Wireless Mode WQ", "Wireless Mode WR", "Wireless Mode WS", "Wireless Mode WT", "Wireless Mode WU", "Wireless Mode WV", "Wireless Mode WW", "Wireless Mode WX", "Wireless Mode WY", "Wireless Mode WZ", "Wireless Mode XA", "Wireless Mode XB", "Wireless Mode XC", "Wireless Mode XD", "Wireless Mode XE", "Wireless Mode XF", "Wireless Mode XG", "Wireless Mode XH", "Wireless Mode XI", "Wireless Mode XJ", "Wireless Mode XK", "Wireless Mode XL", "Wireless Mode XM", "Wireless Mode XN", "Wireless Mode XO", "Wireless Mode XP", "Wireless Mode XQ", "Wireless Mode XR", "Wireless Mode XS", "Wireless Mode XT", "Wireless Mode XU", "Wireless Mode XV", "Wireless Mode XW", "Wireless Mode XX", "Wireless Mode XY", "Wireless Mode XZ", "Wireless Mode YA", "Wireless Mode YB", "Wireless Mode YC", "Wireless Mode YD", "Wireless Mode YE", "Wireless Mode YF", "Wireless Mode YG", "Wireless Mode YH", "Wireless Mode YI", "Wireless Mode YJ", "Wireless Mode YK", "Wireless Mode YL", "Wireless Mode YM", "Wireless Mode YN", "Wireless Mode YO", "Wireless Mode YP", "Wireless Mode YQ", "Wireless Mode YR", "Wireless Mode YS", "Wireless Mode YT", "Wireless Mode YU", "Wireless Mode YV", "Wireless Mode YW", "Wireless Mode YX", "Wireless Mode YY", "Wireless Mode YZ", "Wireless Mode ZA", "Wireless Mode ZB", "Wireless Mode ZC", "Wireless Mode ZD", "Wireless Mode ZE", "Wireless Mode ZF", "Wireless Mode ZG", "Wireless Mode ZH", "Wireless Mode ZI", "Wireless Mode ZJ", "Wireless Mode ZK", "Wireless Mode ZL", "Wireless Mode ZM", "Wireless Mode ZN", "Wireless Mode ZO", "Wireless Mode ZP", "Wireless Mode ZQ", "Wireless Mode ZR", "Wireless Mode ZS", "Wireless Mode ZT", "Wireless Mode ZU", "Wireless Mode ZV", "Wireless Mode ZW", "Wireless Mode ZX", "Wireless Mode ZY", "Wireless Mode ZZ".

3. Encryption in the Router is now set. Each of your computers on your wireless network will now need to be configured with the same passphrase. Refer to the documentation of your wireless network adapter for information on making this change.

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Using a Hexadecimal Key for WEP Encryption

A hexadecimal key is a mixture of numbers and letters from A–F and 0–9. 64-bit keys are five two-digit numbers. 128-bit keys are 13 two-digit numbers. 64-bit keys are five two-digit numbers.

For instance:

AF 0F 4B C3 D4 = 64-bit key

C3 03 0F AF 0F 4B B2 C3 D4 4B C3 D4 E7 = 128-bit key

In the boxes below, make up your key by writing in two characters between A–F and 0–9. You will use this key to program the encryption settings on your Router and your wireless computers.

Example:

64-bit:

128-bit:

Note to Mac users: Original Apple AirPort products support 64-bit encryption only. Apple AirPort 2 products can support 64-bit or 128-bit encryption. Apple AirPort Extreme uses up to 128-bit encryption. Please check your product to see which version you are using. If you cannot configure your network with 128-bit encryption, try 64-bit encryption.

Using the Web-Based Advanced User Interface

Using 802.1x Authentication

1. From the “Security Mode” drop-down menu, select “802.1x”.
2. Enter the IP address of the radius server into the “Radius Server” fields.
3. Enter the port that the radius server is listening on.
4. Enter the radius key into the “Radius Key” field.
5. Enter the re-key interval. Re-key interval is how often the keys are distributed (in seconds).
6. Click “Apply Changes” to finish. You must now set all clients to match these settings.

The screenshot shows a configuration form for 802.1x authentication. The fields are as follows:

Security Mode	802.1X
Radius Server	0 . 0 . 0 . 0
Radius Port	1812
Radius Key	
Re-Key Interval	0 (seconds)
<input checked="" type="checkbox"/> Obscure Key	
<input type="button" value="Clear Changes"/> <input type="button" value="Apply Changes"/>	

Using the Access Point Mode

Note: This advanced feature should be employed by advanced users only. The Router can be configured to work as a wireless network access point. Using this mode will defeat the NAT IP sharing feature and DHCP server. In AP mode, the Router will need to be configured with an IP address that is in the same subnet as the rest of the network that you will bridge to. The default IP address is 192.168.2.254 and subnet mask is 255.255.255.0. These can be customized for your needs.

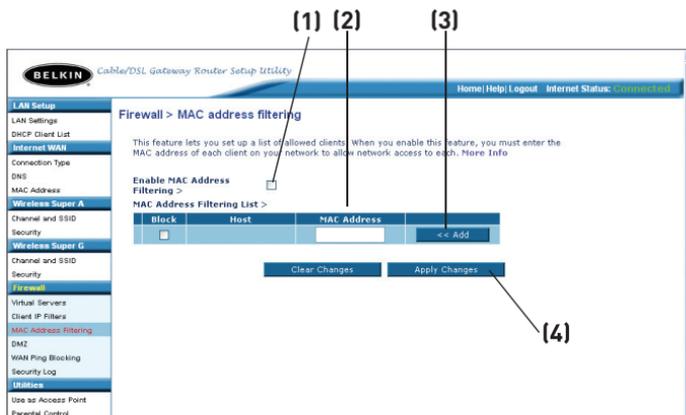
1. Enable the AP mode by selecting “Enable” in the “Use as Access Point only” page. When you select this option, you will be able to change the IP settings.
2. Set your IP settings to match your network. Click “Apply Changes”.
3. Connect a cable from the WAN port on the Router to your existing network.

The Router is now acting as an A+G access point. To access the Router’s Advanced User Interface again, type the IP address you specified into your browser’s navigation bar. You can set the encryption settings, MAC address filtering, SSID, and channel normally.

Setting MAC Address Filtering

The MAC address filter is a powerful security feature that allows you to specify which computers are allowed on the wireless network.

Note: This list applies only to wireless computers. This list can be configured so any computer attempting to access the wireless network that is not specified in the filter list will be denied access. When you enable this feature, you must enter the MAC address of each client (computer) to which you want to allow network access. The “Block” feature lets you turn on and off access to the network easily for any computer without having to add and remove the computer’s MAC address from the list.

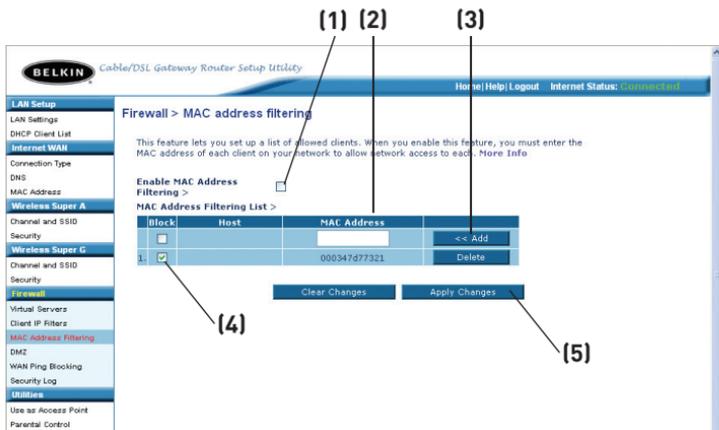


Setting up an Allow Access List

1. Check the “Enable MAC Address Filtering” box **(1)** to begin setting up a list of computers allowed to connect to the wireless network.
2. Next, in the “MAC Address” field that is blank **(2)**, type in the MAC address of the wireless computer you want to be able to access the wireless network, then click “<<Add” **(3)**.
3. Continue to do this until all of the computers you want to add have been entered.
4. Click “Apply Changes” **(4)** to finish.

Setting up a Block Access List

The “Block” list lets you specify computers that you DO NOT want to access the network. Any computer in the list will not be allowed access to the wireless network. All others will.



1. Check the “Enable MAC Address Filtering” box **(1)** to begin setting up a list of computers to be denied access to the wireless network.
2. Next, in the “MAC Address” field that is blank **(2)**, type in the MAC address of the wireless computer you want to block access to the wireless network, then click “<<Add” **(3)**.
3. Continue to do this until all of the computers you want to deny access to have been entered.
4. Check the “Block” box **(4)** next to the MAC address you would like blocked from the network.
5. Click “Apply Changes” **(5)** to finish.