

# WDS (Wireless Distribution System)

Setting your router up in Repeater  
Mode

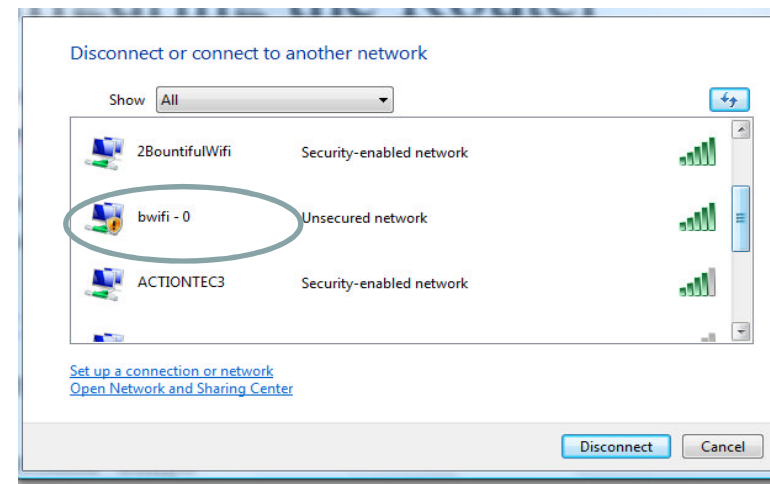
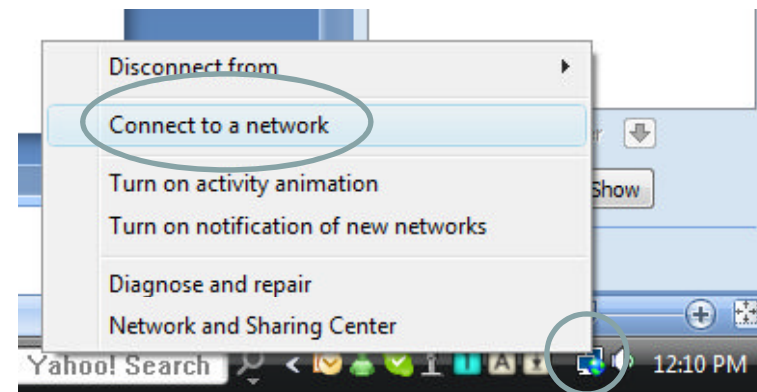
# WDS

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Note: No changes are necessary on the Root AP to enable WDS repeating

# Accessing Web Interface

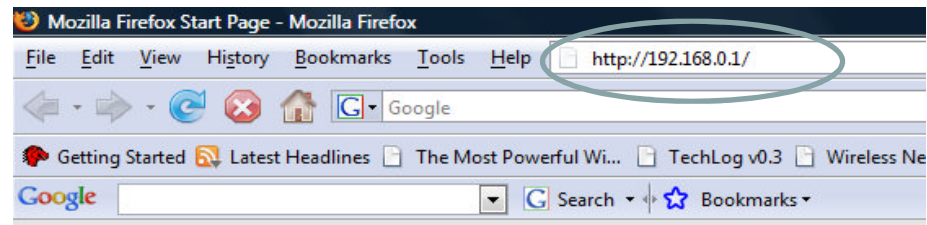
View wireless network(s) and connect to bwifi - 0  
Or the SSID assigned to the  
\*Note The wireless network must be enabled on your computer



# Accessing Web Interface

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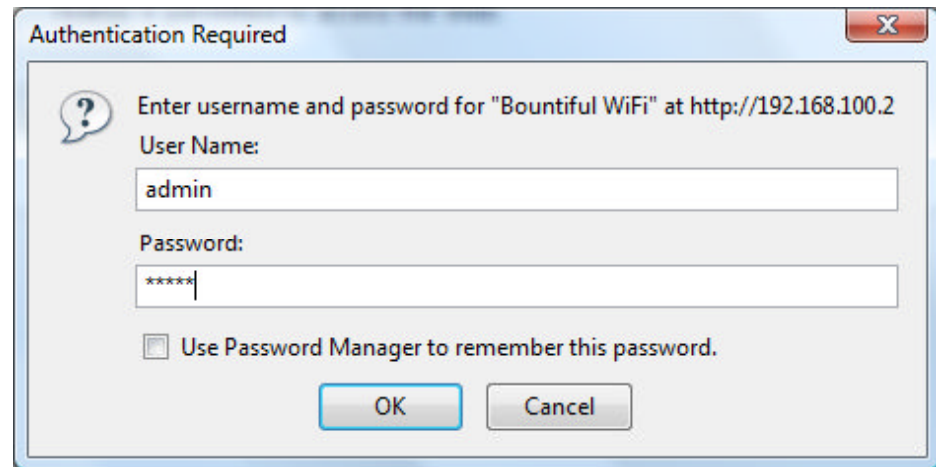
Open an internet browser  
and type in the router IP  
address  
(default=192.168.0.1)  
Or IP address you assigned  
to your router



# Accessing Web Interface

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Type in user name and password  
default username=admin  
password =admin  
Or the username and password  
assigned to the router

A screenshot of a Windows-style dialog box titled "Authentication Required". The dialog box has a question mark icon in a speech bubble on the left. The main text reads: "Enter username and password for 'Bountiful WiFi' at http://192.168.100.2". Below this, there are two input fields: "User Name:" with the text "admin" entered, and "Password:" with "\*\*\*\*\*" entered. At the bottom, there is a checkbox labeled "Use Password Manager to remember this password." which is currently unchecked. There are "OK" and "Cancel" buttons at the bottom right of the dialog box.

Authentication Required

Enter username and password for "Bountiful WiFi" at http://192.168.100.2

User Name:  
admin

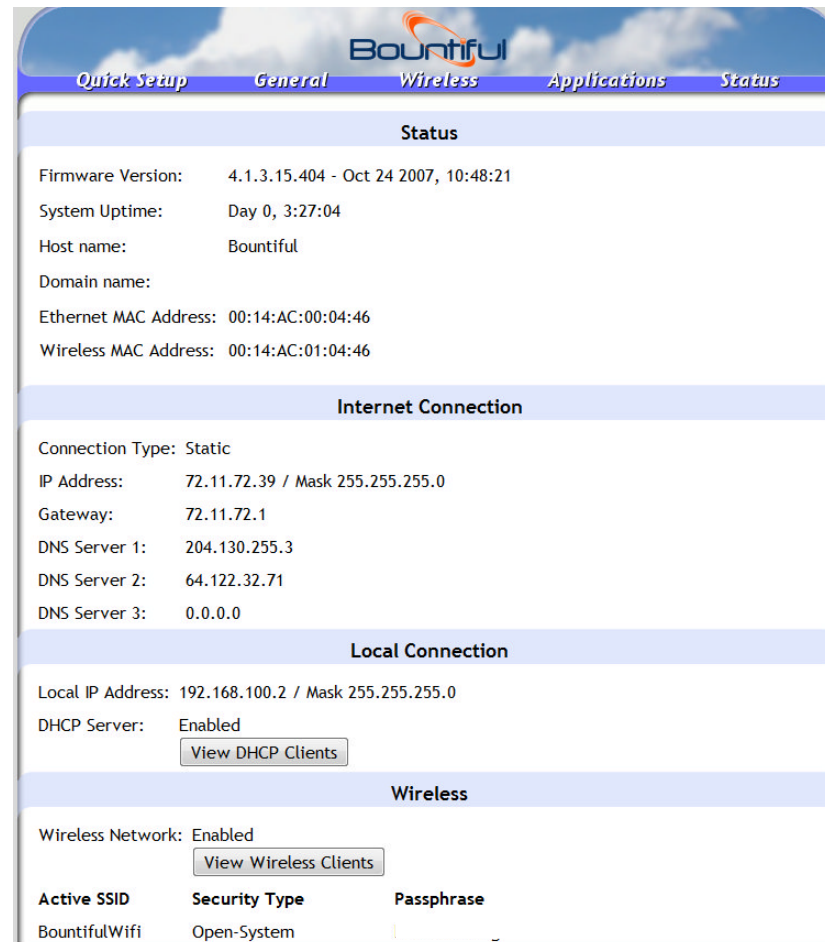
Password:  
\*\*\*\*\*

Use Password Manager to remember this password.

OK Cancel

# Accessing Web Interface

This is the status page of the Bountiful Web Interface



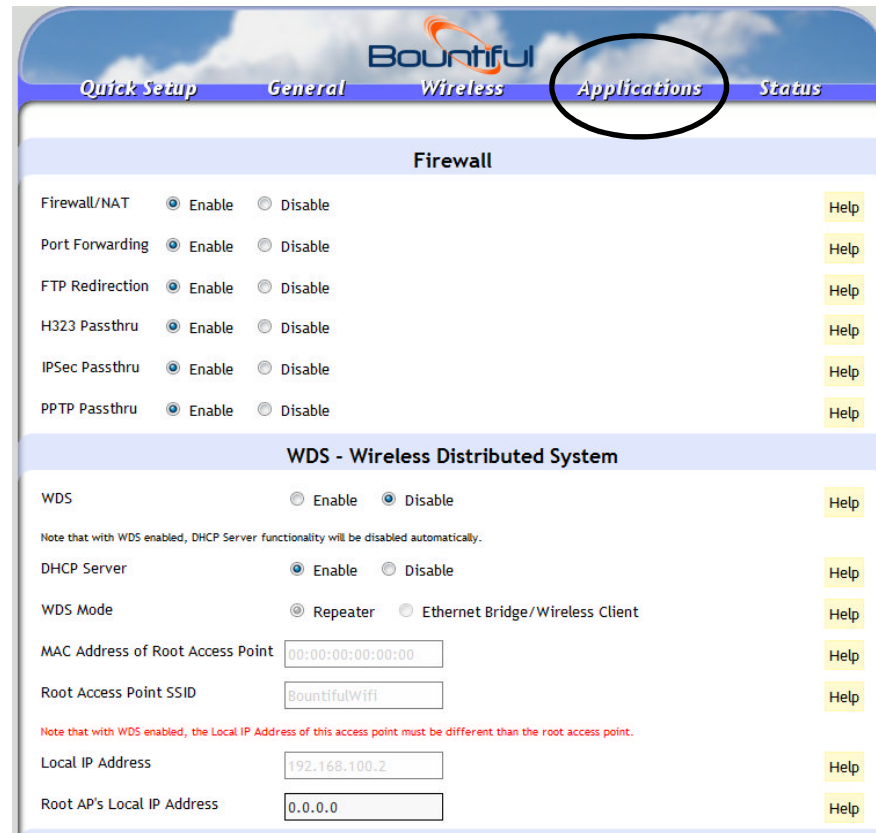
The screenshot shows the Bountiful web interface with the following sections:

- Quick Setup** | **General** | **Wireless** | **Applications** | **Status**
- Status**
  - Firmware Version: 4.1.3.15.404 - Oct 24 2007, 10:48:21
  - System Uptime: Day 0, 3:27:04
  - Host name: Bountiful
  - Domain name:
  - Ethernet MAC Address: 00:14:AC:00:04:46
  - Wireless MAC Address: 00:14:AC:01:04:46
- Internet Connection**
  - Connection Type: Static
  - IP Address: 72.11.72.39 / Mask 255.255.255.0
  - Gateway: 72.11.72.1
  - DNS Server 1: 204.130.255.3
  - DNS Server 2: 64.122.32.71
  - DNS Server 3: 0.0.0.0
- Local Connection**
  - Local IP Address: 192.168.100.2 / Mask 255.255.255.0
  - DHCP Server: Enabled
    - [View DHCP Clients](#)
- Wireless**
  - Wireless Network: Enabled
    - [View Wireless Clients](#)

Active SSID	Security Type	Passphrase
BountifulWifi	Open-System	

# Configuring WDS

Click on applications and scroll down to WDS-Wireless Distributed System



The screenshot shows the Bountiful web interface with the 'Applications' tab selected. The 'Firewall' section includes options for Firewall/NAT, Port Forwarding, FTP Redirection, H323 Passthru, IPSec Passthru, and PPTP Passthru, all currently set to 'Enable'. The 'WDS - Wireless Distributed System' section includes options for WDS (set to 'Disable'), DHCP Server (set to 'Enable'), WDS Mode (set to 'Repeater'), and input fields for MAC Address of Root Access Point (00:00:00:00:00:00), Root Access Point SSID (BountifulWifi), Local IP Address (192.168.100.2), and Root AP's Local IP Address (0.0.0.0). A red note states: 'Note that with WDS enabled, the Local IP Address of this access point must be different than the root access point.'

# Configuring WDS

Enable WDS

**WDS - Wireless Distributed System**

WDS  Enable  Disable

*Note that with WDS enabled, DHCP Server functionality will be disabled automatically.*

DHCP Server  Enable  Disable

WDS Mode  Repeater  Ethernet Bridge/Wireless Client

MAC Address of Root Access Point

Root Access Point SSID

*Note that with WDS enabled, the Local IP Address of this access point must be different than the root access point.*

Local IP Address

Root AP's Local IP Address

# Configuring WDS

Click on Repeater  
in WDS Mode

### WDS - Wireless Distributed System

WDS  Enable  Disable

Note that with WDS enabled, DHCP Server functionality will be disabled automatically.

DHCP Server  Enable  Disable

WDS Mode  Repeater  Ethernet Bridge/Wireless Client

MAC Address of Root Access Point

Root Access Point SSID

Note that with WDS enabled, the Local IP Address of this access point must be different than the root access point.

Local IP Address

Root AP's Local IP Address

# Configuring WDS

Type in the Root  
SSID

**WDS - Wireless Distributed System**

WDS  Enable  Disable

Note that with WDS enabled, DHCP Server functionality will be disabled automatically.

DHCP Server  Enable  Disable

WDS Mode  Repeater  Ethernet Bridge/Wireless Client

MAC Address of Root Access Point

Root Access Point SSID

Note that with WDS enabled, the Local IP Address of this access point must be different than the root access point.

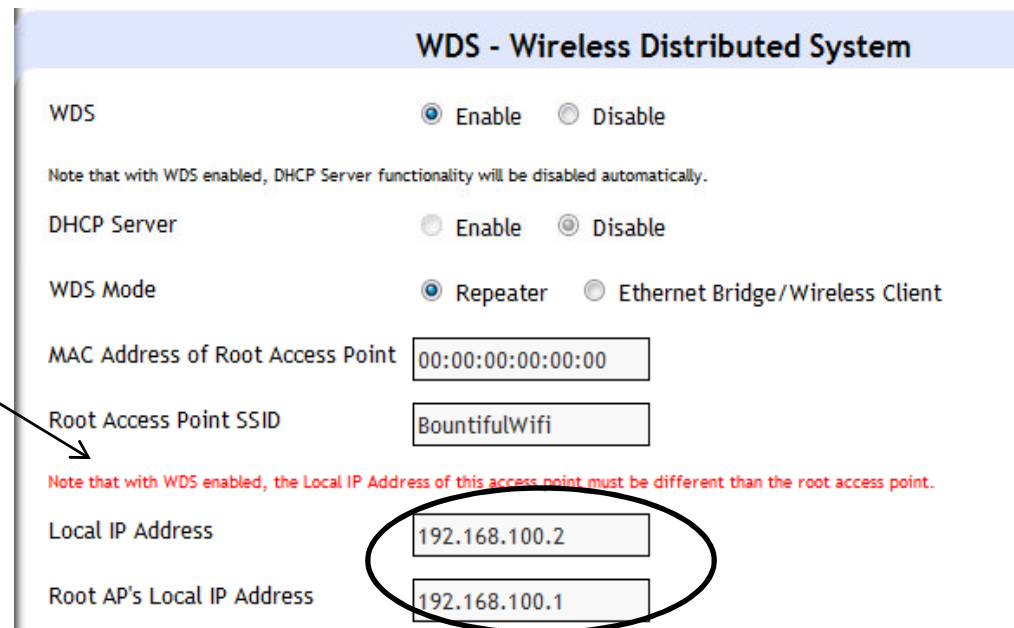
Local IP Address

Root AP's Local IP Address

# Configuring WDS

Type in the Local IP address and the root IP address

\* Note that with WDS enabled, the Local IP Address of this access point must be different than the root access point.



**WDS - Wireless Distributed System**

WDS  Enable  Disable

Note that with WDS enabled, DHCP Server functionality will be disabled automatically.

DHCP Server  Enable  Disable

WDS Mode  Repeater  Ethernet Bridge/Wireless Client

MAC Address of Root Access Point

Root Access Point SSID

Note that with WDS enabled, the Local IP Address of this access point must be different than the root access point.

Local IP Address

Root AP's Local IP Address

# Configuring WDS

\*Note If the root AP has encryption the repeating router must use the same passphrase key This can be checked under the wireless tab

Repeating only allows WEP encryption

A screenshot of a web-based configuration interface titled "Authentication". The page contains several fields and options:

- Wireless Authentication:** A dropdown menu with "Open System" selected.
- Wireless Passphrase Key:** A text input field, circled in black, with a "Hexadecimal" radio button selected and an "ASCII" radio button unselected.
- Group Key Renewal:** A text input field containing the value "1800".
- Radius Server:** An empty text input field.
- Radius Port:** A text input field containing the value "1812".
- Radius Secret:** An empty text input field.
- Radius is Local:** Radio buttons for "Yes" and "No", with "No" selected.

# Verifying association of repeating AP

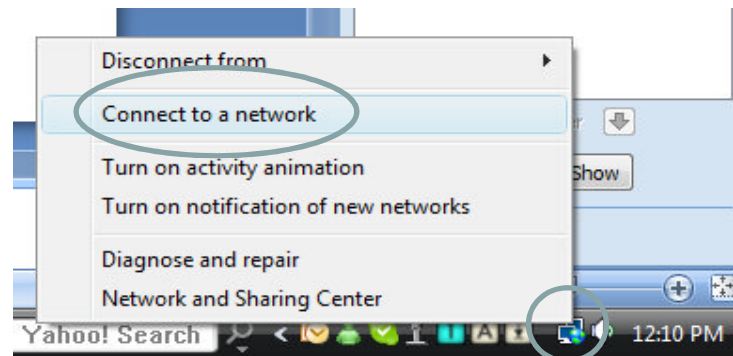
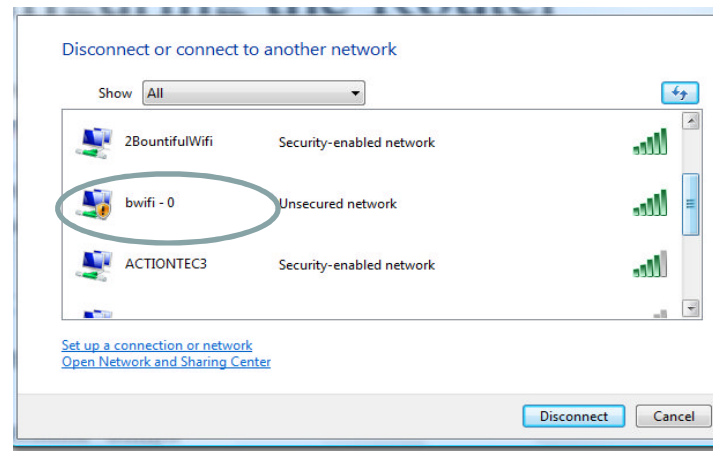
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Wait 30 seconds to check if the root AP and repeater that have associated

To check to see if the routers have associated  
Log into Root AP's Web Interface

# Logging into the Root AP

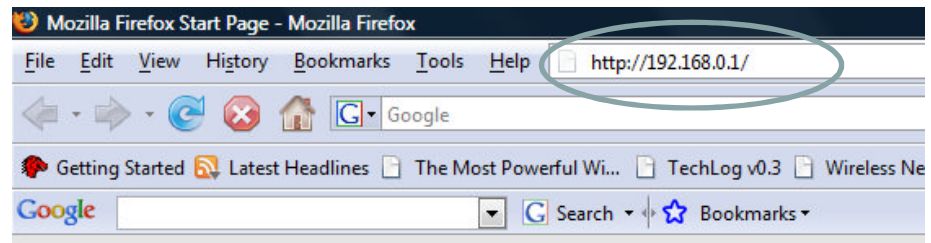
View wireless network(s)  
and connect to bwifi - 0  
Or the SSID assigned to the  
router \*Note The wireless  
network must be enabled on  
your computer



# Logging into the Root AP

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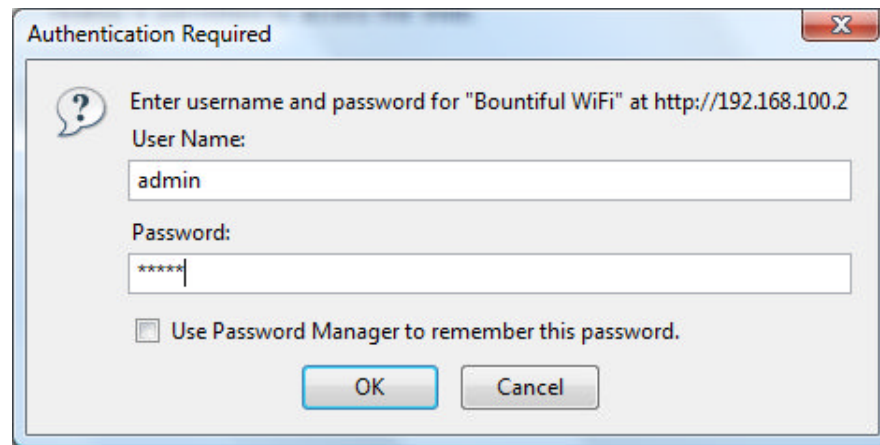
Open an internet browser and type in the router's IP address (default=192.168.0.1)  
Or IP address assigned to the router



# Logging into the Root AP

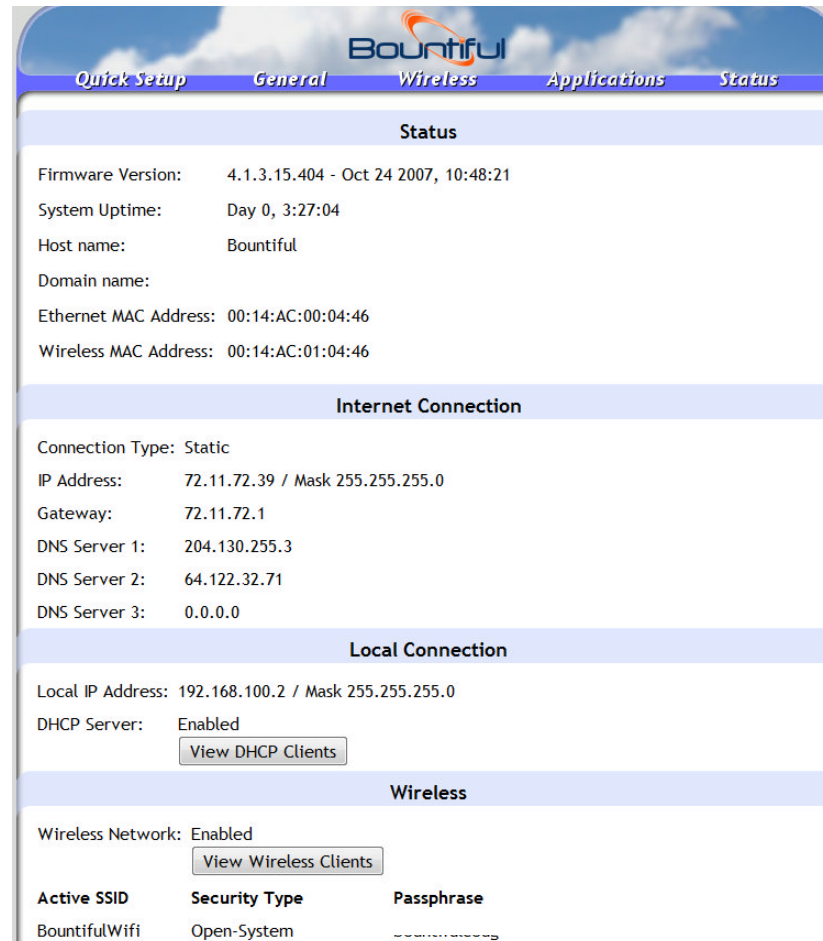
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Type in user name and  
password default  
username=admin  
password =admin  
Or the username and  
password the was  
assigned to the router



# Logging into the Root AP

This is the status page of the Bountiful Web Interface



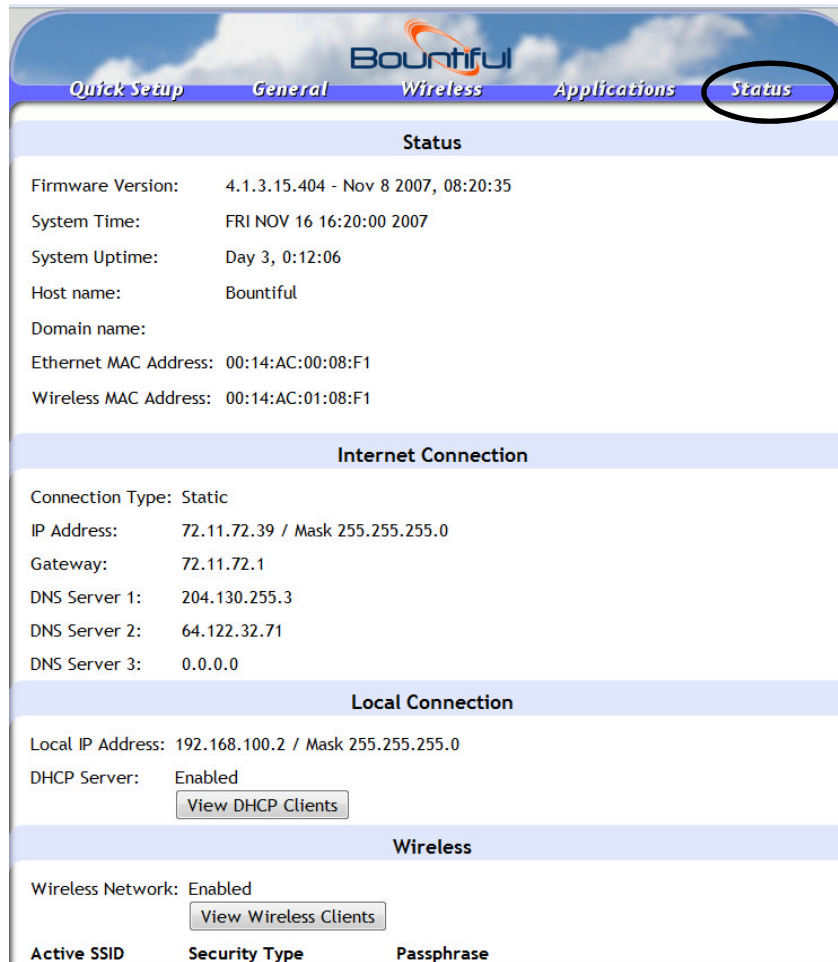
The screenshot shows the Bountiful web interface with the following sections:

- Navigation:** Quick Setup, General, **Wireless**, Applications, Status
- Status:**
  - Firmware Version: 4.1.3.15.404 - Oct 24 2007, 10:48:21
  - System Uptime: Day 0, 3:27:04
  - Host name: Bountiful
  - Domain name:
  - Ethernet MAC Address: 00:14:AC:00:04:46
  - Wireless MAC Address: 00:14:AC:01:04:46
- Internet Connection:**
  - Connection Type: Static
  - IP Address: 72.11.72.39 / Mask 255.255.255.0
  - Gateway: 72.11.72.1
  - DNS Server 1: 204.130.255.3
  - DNS Server 2: 64.122.32.71
  - DNS Server 3: 0.0.0.0
- Local Connection:**
  - Local IP Address: 192.168.100.2 / Mask 255.255.255.0
  - DHCP Server: Enabled
  - [View DHCP Clients](#)
- Wireless:**
  - Wireless Network: Enabled
  - [View Wireless Clients](#)

Active SSID	Security Type	Passphrase
BountifulWifi	Open-System	.....

# Validate Connection

Click on the status page of the Bountiful Web Interface



**Quick Setup** **General** **Wireless** **Applications** **Status**

### Status

Firmware Version: 4.1.3.15.404 - Nov 8 2007, 08:20:35  
System Time: FRI NOV 16 16:20:00 2007  
System Uptime: Day 3, 0:12:06  
Host name: Bountiful  
Domain name:  
Ethernet MAC Address: 00:14:AC:00:08:F1  
Wireless MAC Address: 00:14:AC:01:08:F1

### Internet Connection

Connection Type: Static  
IP Address: 72.11.72.39 / Mask 255.255.255.0  
Gateway: 72.11.72.1  
DNS Server 1: 204.130.255.3  
DNS Server 2: 64.122.32.71  
DNS Server 3: 0.0.0.0

### Local Connection

Local IP Address: 192.168.100.2 / Mask 255.255.255.0  
DHCP Server: Enabled  
[View DHCP Clients](#)

### Wireless

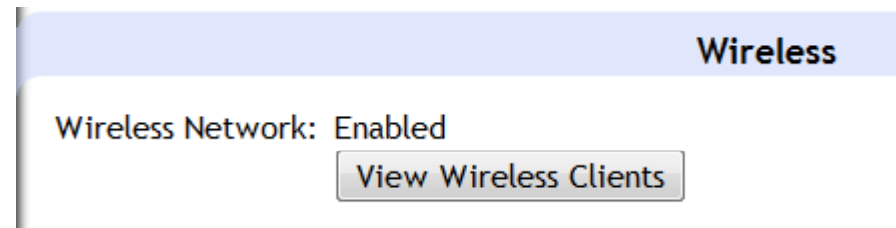
Wireless Network: Enabled  
[View Wireless Clients](#)

Active SSID	Security Type	Passphrase
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# Validate Connection

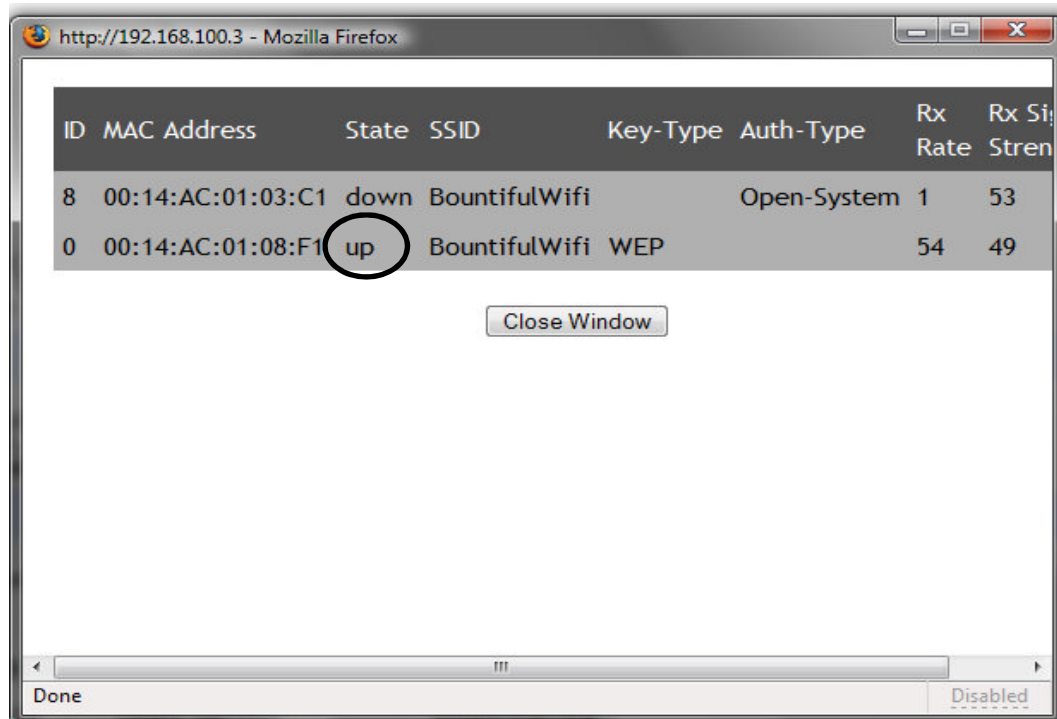
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Scroll down to Wireless  
and click on View Wireless  
Clients



# Validate Connection

Notice that the MAC address of the Repeaters state is UP



ID	MAC Address	State	SSID	Key-Type	Auth-Type	Rx Rate	Rx Signal
8	00:14:AC:01:03:C1	down	BountifulWifi		Open-System	1	53
0	00:14:AC:01:08:F1	up	BountifulWifi	WEP		54	49

Close Window

Done Disabled

# WDS

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The router is now set up in  
repeater mode