

**BELKIN® | Pulse™**

**Network Monitoring  
User Guide  
Pulse Appliance**

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## Pulse Appliance Overview

The Pulse appliance is the hardware component associated with the Pulse system. The appliance works together with the Dashboard and the Pulse datacenters to provide reliable and robust monitoring.



**NOTE:** There is a reset switch on the back of the Pulse appliance. This reset switch should only be pressed under the instruction of Belkin support. Belkin is not responsible for damage caused by pressing the reset switch.

### ***LED Behavior Pattern***

The Pulse Monitoring System has two Light-Emitting Diodes (LED) on the front of the case. You can expect a pattern of flashing LED's before they turn solid on normal node startup. The node is ready to use after the lights turn a solid Blue and Amber.

The following chart explains the LED Behavioral Pattern in different conditions.

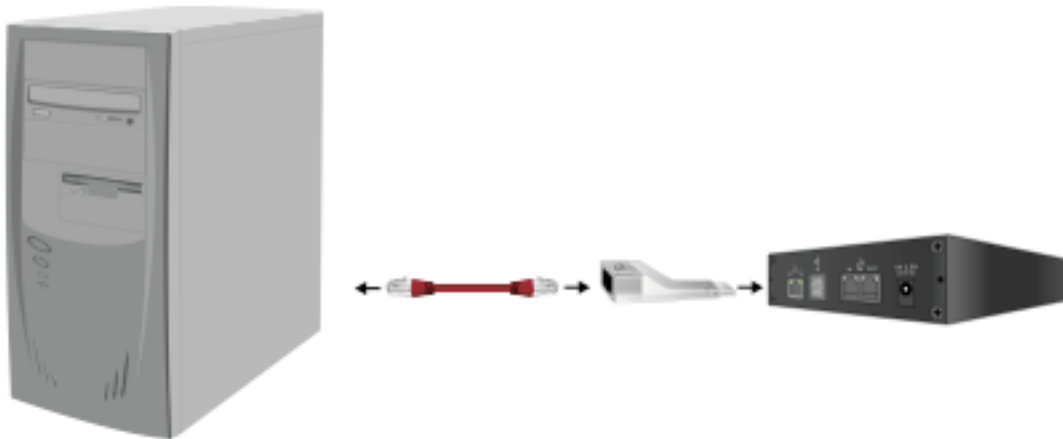
<b>If the LED's are...</b>	<b>Then...</b>
Red /amber flash	The node is about to reboot.
Flashing red	The node is updating or resetting.
Slow flashing blue	The node is communicating via the modem.
Fast flashing blue	The node is offline. It cannot communicate with the hub.
Fast flashing amber	Activity - The node is communicating with the hub.

## Node Console

The Node Console allows you to log directly into the Pulse appliance. You must have a network cable connected to allow you to login. The Belkin Pulse USB adapter is the only adapter that will work.

### *Connecting the Hardware*

Attach the red crossover cable to the USB adapter, and attach the other end of the cable to your computer. Next, plug the USB adapter into one of the USB jacks on the back of Pulse. Your computers network settings should be set to DHCP.



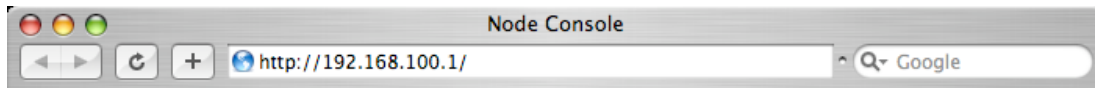
**Note:** If the red link light on the USB adapter does not illuminate, try a standard Ethernet cable. Some computers require the use of a standard Ethernet cable instead of a crossover cable.

## Logging In

To log into the Web Console, set your web browser to: <http://192.168.100.1>. Enter the following username and password:

Username: admin

Password: admin



# BELKIN.

## Node Console Login

Username:

Password:

For support questions please visit <http://www.belkin.com/support/>

## View Network Settings

The View Network Settings page is displayed by default upon logging into the Pulse Administration Console.

You may view your current network settings and configuration log on this page. Select **Renew DHCP Lease** to obtain a new IP address, if you require one.

## BELKIN administration console

<p><b>available tasks</b></p> <ul style="list-style-type: none"> <li><a href="#">view network settings</a></li> <li><a href="#">edit network settings</a></li> <li><a href="#">test network</a></li> <li><a href="#">change login information</a></li> <li><a href="#">update firmware</a></li> <li> </li> <li><a href="#">about</a></li> <li> </li> <li><a href="#">logout</a></li> </ul>	<p>Current Settings</p> <p><b>Network Type</b> DHCP</p> <p><b>Hostname</b> monitor.ourcompany.com</p> <p><b>IP Address</b> 192.168.2.109</p> <p><b>Netmask</b> 255.255.255.0</p> <p><b>Gateway</b> 192.168.2.1</p> <p><b>DNS One</b> 192.168.2.254</p> <p><b>DNS Two</b> 192.168.2.31</p> <p style="text-align: center;"><input type="button" value="Renew DHCP Lease"/></p> <p>Configuration Log</p> <pre>[03/22/2007 07:02:09 GMT-06:00] Attempt OK Hub services: OK  DNS 192.168.2.254: OK  1 192.168.2.254 [open] 0.000 ms  DNS 192.168.2.31: OK  1 192.168.2.31 [open] 10.002 ms</pre>
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## Edit Network Settings

The Edit Network Settings page allows you to modify your network settings using DHCP or Static addresses. Your current network values, last network values and the configuration log are displayed.

### BELKIN administration console

**available tasks**

- [view network settings](#)
- [edit network settings](#)
- [test network](#)
- [change login information](#)
- [update firmware](#)
- 
- [about](#)
- 
- [logout](#)

Edit Network Settings

**Network Type** dhcp  static

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**Static Network Settings**

	Current Value	Last Static Value
<b>Hostname</b>	monitor.ourcompany.com	<input type="text" value="monitor.ourcompany.com"/>
<b>IP Address</b>	192.168.2.109	<input type="text" value="192.168.2.109"/>
<b>Netmask</b>	255.255.255.0	<input type="text" value="255.255.255.0"/>
<b>Gateway</b>	192.168.2.1	<input type="text" value="192.168.2.1"/>
<b>DNS Primary</b>	192.168.2.254	<input type="text" value="192.168.2.254"/>
<b>DNS Secondary</b>	192.168.2.31	<input type="text" value="192.168.2.31"/>

Configuration OK

**Configuration Log**

```

[03/22/2007 07:02:09 GMT-06:00] Attempt OK
Hub services: OK

DNS 192.168.2.254: OK
 1 192.168.2.254 [open] 0.000 ms

DNS 192.168.2.31: OK
 1 192.168.2.31 [open] 10.002 ms
                    
```

A Configuration Error or Configuration OK message will be displayed depending upon the results of your current configuration.

Button	Description
Reset	Revert to previous network settings prior to clicking “apply changes”
Apply Changes	Accepts the new network setting you have entered. Settings are verified before they are applied. If there is a conflict or configuration error, the error will be displayed and the changes will not be accepted.
FORCE Changes	Use with caution. Accepts the new network setting you have entered, but DOES NOT verify these settings. Selecting “FORCE” will apply the settings, even if they do not work.

## Test Network

The Test Network page allows you to test and diagnose your network environment using multiple tools to ensure proper network communications exist. Select “Test Network” to run any of the following network tests.

Network Test	Description
Required Connectivity – Basic	Verifies TCP port 80 is open Verifies the appliance can connect to the Pulse time servers
Required Connectivity – HUB	Verifies that the Pulse appliance is able to communicate with the Pulse datacenters
Ping	Send ICMP echo requests to test whether a remote host is reachable
Traceroute	View the route data takes to reach it’s destination
Nslookup	Test whether a domain name can be resolved to an IP address



# BELKIN administration console

**available tasks**

- view network settings
- edit network settings
- test network
- change login information
- update firmware
  
- about
  
- logout

## Test Network

The following forms allow you to test your network environment with PING, TRACEROUTE and NSLOOKUP.

**BASIC** - Test http and ntp ports.

**HUB** - Test for hub connectivity.

**PING** - Test if an IP address/host is reachable

IP/Hostname:

**TRACEROUTE** - View the route to an IP address/host

IP/Hostname:

**NSLOOKUP** - Check if a domain name can be resolved to an IP address

IP/Hostname:

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If you still cannot get Pulse to connect, visit [www.belkin.com/pulse](http://www.belkin.com/pulse) for troubleshooting tips and technical-support information.

## Change Login Information

The Change Login Information page allows you to change your local console Username and Password. This is NOT your Dashboard Username and Password.

**Note:** If your Pulse appliance is online (indicated by a solid blue light), you can change the Node Console Username and Password from the Dashboard. To change your Node Console credentials from the Dashboard, log into <https://pulse.belkin.com>. Select "Nodes" from the Access Bar. Double click a node. Select the "Console" tab.

### BELKIN administration console

Change Login Information

**Current Username** admin

**New Username**  
6 or more characters  
Letters and numbers only

**New Password**  
6 or more characters  
Letters and numbers only

**Confirm Password**

apply changes

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Field	Description
Current Username	Displays your Username prior to applying changes
New Username	Specify a new Username. The new Username must be 6 or more characters and is restricted to letters and numbers.
New Password	Specify a new Password. The new Password must be 6 or more characters and is restricted to letters and numbers.
Confirm Password	Requires you to re-enter your password to verify that you did not mis-type your new password.
Apply Changes	Select to apply your new Username and Password. NOTE: It is highly recommended that you change your Username and Password after purchasing Pulse.

## Update Firmware

The Pulse appliance automatically downloads and installs the latest firmware under normal circumstance. Should the firmware require updating, the Update Firmware page allows you to download and update the latest firmware onto your Pulse appliance.

# BELKIN administration console

The screenshot displays the Belkin administration console interface. On the left, a sidebar titled "available tasks" lists several options: "view network settings", "edit network settings", "test network", "change login information", "update firmware" (which is underlined and highlighted), "about", and "logout". The main content area on the right is titled "Update Firmware" and shows the current "Node Software Version: 1.5.5". Below this information is a button labeled "Update to Latest Firmware".

## About

The About page displays the current Firmware version and links to licensing information and source code that pertain to packages for the Pulse Appliance.

# BELKIN administration console

**available tasks**

- view network settings
- edit network settings
- test network
- change login information
- update firmware
- about
- logout

About

Node Software Version: 1.5.5

Some software on this node is licensed under the  
[GNU General Public Licence](#)  
and the  
[GNU Lesser General Public Licence](#)

A list of packages, and their source code can be found at:  
<http://pulse.belkin.com>

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## Logout

The Logout option will log you out of the Pulse Appliances Administration Console. The Node Console Login screen is displayed following logout.