

Email Settings

The Email feature can be used to send the system log files, router alert messages, and firmware update notification to your email address.

Enable Email Notification: When this option is enabled, router activity logs are e-mailed to a designated email address.

From Email Address: This email address will appear as the sender when you receive a log file or firmware upgrade notification via email.

To Email Address: Enter the email address where you want the email sent.

SMTP Server Address: Enter the SMTP server address for sending email. If your SMTP server requires authentication, select this option.

Enable Authentication: Check this box if your SMTP server requires authentication.

Account Name: Enter your account for sending email.

Password: Enter the password associated with the account. Re-type the password associated with the account.

On Log Full: When this option is selected, logs will be sent via email when the log is full.

On Schedule: Selecting this option will send the logs via email according to schedule.

Schedule: This option is enabled when On Schedule is selected. You can select a schedule from the list of defined schedules. To create a schedule, go to **Tools > Schedules**.

The screenshot shows the D-Link DIR-628 web interface. The top navigation bar includes 'DIR-628 //', 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists 'ADMIN', 'TIME', 'SYSLOG', 'EMAIL SETTINGS', 'SYSTEM', 'FIRMWARE', 'DYNAMIC DNS', 'SYSTEM CHECK', and 'SCHEDULES'. The main content area is titled 'EMAIL SETTINGS' and contains the following sections:

- ENABLE**: A checkbox for 'Enable Email Notification'.
- EMAIL SETTINGS**: Input fields for 'From Email Address', 'To Email Address', 'SMTP Server Address', 'Account Name', 'Password', and 'Verify Password'. There is also a checkbox for 'Enable Authentication'.
- EMAIL LOG WHEN FULL OR ON SCHEDULE**: Checkboxes for 'On Log Full' and 'On Schedule'. A dropdown menu for 'Schedule' is set to 'Never', and a 'Details' field is also set to 'Never'.

The right sidebar contains 'Helpful Hints...' and 'More...' links.

System Settings

Save Settings to Local Hard Drive: Use this option to save the current router configuration settings to a file on the hard disk of the computer you are using. First, click the Save button. You will then see a file dialog, where you can select a location and file name for the settings.

Load Settings from Local Hard Drive: Use this option to load previously saved router configuration settings. First, use the Browse control to find a previously save file of configuration settings. Then, click the Load button to transfer those settings to the router.

Restore to Factory Default Settings: This option will restore all configuration settings back to the settings that were in effect at the time the router was shipped from the factory. Any settings that have not been saved will be lost, including any rules that you have created. If you want to save the current router configuration settings, use the Save button above.

Reboot Device: Click to reboot the router.

The screenshot displays the D-Link DIR-628 web interface. At the top, the D-Link logo is visible. Below it, a navigation bar includes tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar lists various configuration categories, with 'SYSTEM' currently selected. The main content area is titled 'SYSTEM SETTINGS' and contains the following text and controls:

SYSTEM SETTINGS

The System Settings section allows you to reboot the device, or restore the router to the factory default settings. Restoring the unit to the factory default settings will erase all settings, including any rules that you have created.

The current system settings can be saved as a file onto the local hard drive. The saved file or any other saved setting file created by device can be uploaded into the unit.

SYSTEM SETTINGS

Save To Local Hard Drive:

Load From Local Hard Drive:

Restore To Factory Default:
 Restore all settings to the factory defaults.

Reboot The Device:

WIRELESS

Helpful Hints...

Once your router is configured the way you want it, you can save the configuration settings to a configuration file.

You might need this file so that you can load your configuration later in the event that the router's default settings are restored.

To save the configuration, click the **Save Configuration** button.

[More...](#)

Update Firmware

You can upgrade the firmware of the Router here. Make sure the firmware you want to use is on the local hard drive of the computer. Click on **Browse** to locate the firmware file to be used for the update. Please check the D-Link support site for firmware updates at <http://support.dlink.com>. You can download firmware upgrades to your hard drive from the D-Link support site.

Firmware Upgrade: Click on **Check Online Now for Latest Firmware Version** to find out if there is an updated firmware; if so, download the new firmware to your hard drive.

Browse: After you have downloaded the new firmware, click **Browse** to locate the firmware update on your hard drive. Click **Upload** to complete the firmware upgrade.

Notifications Options: Check **Automatically Check Online for Latest Firmware Version** to have the router check automatically to see if there is a new firmware upgrade.

Check **Email Notification of Newer Firmware Version** to have the router send an email when there is a new firmware available.

The screenshot displays the D-Link web interface for the DIR-628 router. The top navigation bar includes 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists various configuration options, with 'FIRMWARE' selected. The main content area is titled 'FIRMWARE' and contains the following sections:

- FIRMWARE:** A message stating: "There may be new firmware for your DIR-628 to improve functionality and performance. To upgrade the firmware, locate the upgrade file on the local hard drive with the Browse button. Once you have found the file to be used, click the Upload button below to start the firmware upgrade." Below this message are two buttons: "Save Settings" and "Don't Save Settings".
- FIRMWARE INFORMATION:** Displays "Current Firmware Version : 1.00" and "Current Firmware Date : 2008/03/12". It includes a "Check Online Now for Latest Firmware Version" link with a "Check Now" button.
- FIRMWARE UPGRADE:** Contains a red note: "Note: Some firmware upgrades reset the configuration options to the factory defaults. Before performing an upgrade, be sure to save the current configuration from the Tools → System screen." Below the note, it states: "To upgrade the firmware, your PC must have a wired connection to the router. Enter the name of the firmware upgrade file, and click on the Upload button." There is an "Upload" field with a "Browse..." button and an "Upload" button.
- FIRMWARE UPGRADE NOTIFICATION OPTIONS:** Includes two checkboxes: "Automatically Check Online for Latest Firmware Version" (checked) and "Email Notification of Newer Firmware Version" (unchecked).

On the right side of the interface, there is a "Helpful Hints..." section with text: "Firmware updates are released periodically to improve the functionality of your router and to add features. If you run into a problem with a specific feature of the router, check if updated firmware is available for your router." and a "More..." link.

DDNS

The DDNS feature allows you to host a server (Web, FTP, Game Server, etc...) using a domain name that you have purchased (www.whateveryournameis.com) with your dynamically assigned IP address. Most broadband Internet Service Providers assign dynamic (changing) IP addresses. Using a DDNS service provider, your friends can enter in your domain name to connect to your server no matter what your IP address is.

DDNS: Dynamic Domain Name System is a method of keeping a domain name linked to a changing IP Address. Check the box to enable DDNS.

Server Address: Choose your DDNS provider from the drop down menu.

Host Name: Enter the Host Name that you registered with your DDNS service provider.

Username or Key: Enter the Username for your DDNS account.

Password or Key: Enter the Password for your DDNS account.

Timeout: Enter a time (in hours).

Status: Displays the current status - Connected or Disconnected.

The screenshot shows the D-Link DIR-628 web interface. The top navigation bar includes 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The 'DYNAMIC DNS' section is highlighted in orange. It contains the following text and fields:

DYNAMIC DNS

The DDNS feature allows you to host a server (Web, FTP, Game Server, etc...) using a domain name that you have purchased (www.whateveryournameis.com) with your dynamically assigned IP address. Most broadband Internet Service Providers assign dynamic (changing) IP addresses. Using a DDNS service provider, your friends can enter your host name to connect to your game server no matter what your IP address is.

Sign up for D-Link's Free DDNS service at www.DLinkDDNS.com.

Buttons: Save Settings, Don't Save Settings

DYNAMIC DNS

Enable Dynamic DNS:

Server Address: << Select Dynamic DNS Server

Host Name: (e.g.: me.mydomain.net)

Username or Key:

Password or Key:

Verify Password or Key:

Timeout: 576 (hours)

Status: Disconnect

Bottom bar: WIRELESS

System Check

Ping Test: The Ping Test is used to send Ping packets to test if a computer is on the Internet. Enter the IP Address that you wish to Ping, and click **Ping**.

Ping Results: The results of your ping attempts will be displayed here.

The screenshot displays the D-Link DIR-628 web interface. At the top, the D-Link logo is visible. Below it, a navigation menu includes tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The TOOLS tab is selected, and the PING TEST tool is active. The interface shows a sidebar with various configuration options like ADMIN, TIME, SYSLOG, EMAIL SETTINGS, SYSTEM, FIRMWARE, DYNAMIC DNS, SYSTEM CHECK, and SCHEDULES. The main content area is divided into sections: PING TEST (with a description and a form for Host Name or IP Address), PING TEST (with a description and a form for Host Name or IP Address), and PING RESULT (with a description and a form for Host Name or IP Address). A 'WIRELESS' section is also visible at the bottom. On the right side, there is a 'Helpful Hints...' section with a 'More...' link.

Schedules

Name: Enter a name for your new schedule.

Days: Select a day, a range of days, or All Week to include every day.

Time: Check **All Day - 24hrs** or enter a start and end time for your schedule.

Save: Click **Save** to save your schedule. You must click Save Settings at the top for your schedules to go into effect.

Schedule Rules List: The list of schedules will be listed here. Click the **Edit** icon to make changes or click the **Delete** icon to remove the schedule.

The screenshot shows the D-Link DIR-628 web interface. The top navigation bar includes 'DIR-628', 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists various configuration options: ADMIN, TIME, SYSLOG, EMAIL SETTINGS, SYSTEM, FIRMWARE, DYNAMIC DNS, SYSTEM CHECK, and SCHEDULES. The main content area is titled 'SCHEDULES' and contains a description: 'The Schedule configuration option is used to manage schedule rules for various firewall and parental control features.' Below this is the 'ADD SCHEDULE RULE' section, which includes a 'Name' input field, 'Day(s)' selection (radio buttons for 'All Week' and 'Select Day(s)', with checkboxes for Sun, Mon, Tue, Wed, Thu, Fri, Sat), an 'All Day - 24 hrs' checkbox, and 'Start Time' and 'End Time' fields with AM/PM dropdowns and 'Add'/'Clear' buttons. The 'SCHEDULE RULES LIST' section shows a table with columns for 'Name', 'Day(s)', and 'Time Frame'. The right sidebar, titled 'Helpful Hints...', provides instructions: 'Give each schedule a name that is meaningful to you. For example, a schedule for Monday through Friday from 3:00pm to 9:00pm, might be called "After School".', 'Click Save to add a completed schedule to the list below.', 'Click the Edit icon to change an existing schedule.', and 'Click the Delete icon to permanently delete a schedule.' A 'More...' link is also present.

Device Information

This page displays the current information for the DIR-628. It will display the LAN, WAN (Internet), and Wireless information.

If your Internet connection is set up for a Dynamic IP address then a **Release** button and a **Renew** button will be displayed. Use **Release** to disconnect from your ISP and use **Renew** to connect to your ISP.

If your Internet connection is set up for PPPoE, a **Connect** button and a **Disconnect** button will be displayed. Use **Disconnect** to drop the PPPoE connection and use **Connect** to establish the PPPoE connection.

General: Displays the router's time and firmware version.

WAN: Displays the MAC address and the public IP settings for the router.

LAN: Displays the MAC address and the private (local) IP settings for the router.

Wireless LAN: Displays the wireless MAC address and your wireless settings such as SSID and Channel.

LAN Computers: Displays computers and devices that are connected to the router via Ethernet and that are receiving an IP address assigned by the router (DHCP).

The screenshot shows the D-Link DIR-628 web interface. The top navigation bar includes tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The main content area is titled "DEVICE INFORMATION" and contains the following sections:

- GENERAL:**
 - Time : Saturday, January 31, 2004 12:08:28 PM
 - Firmware Version : 1.00, 2008/03/12
- WAN:**
 - Connection Type : DHCP Client
 - QoS Engine : Active
 - Cable Status : Connected
 - Network Status : Established
 - Connection Up Time : 2 Days, 21:28:15
 - Buttons:
 - MAC Address : 00:03:64:00:01:23
 - IP Address : 192.168.69.101
 - Subnet Mask : 255.255.255.0
 - Default Gateway : 192.168.69.1
 - Primary DNS Server : 192.152.81.1
 - Secondary DNS Server : 67.130.140.2
- LAN:**
 - MAC Address : 00:03:64:00:01:24
 - IP Address : 192.168.0.1
 - Subnet Mask : 255.255.255.0
 - DHCP Server : Enabled
- WIRELESS LAN:**
 - Wireless Radio : Enabled
 - MAC Address : 00:1E:58:2D:00:C2
 - Network Name (SSID) : dr628a1
 - Channel : 36
 - Security Mode : WEP
 - Wi-Fi Protected Setup : Enabled/Configured
- LAN COMPUTERS:**

IP Address	Name (if any)	MAC
192.168.0.197	PMLab16	00:0c:f1:fe:ee:cd
192.168.0.199	PMLab15	00:16:17:44:4a:d9

Log

The router automatically logs (records) events of possible interest in its internal memory. If there isn't enough internal memory for all events, logs of older events are deleted but logs of the latest events are retained. The Logs option allows you to view the router logs. You can define what types of events you want to view and the level of the events to view. This router also has external Syslog Server support so you can send the log files to a computer on your network that is running a Syslog utility.

What to View: You can select the types of messages that you want to display from the log. **Firewall & Security**, **System**, and **Router Status** messages can be selected.

View Levels: There are three levels of message importance: **Informational**, **Warning**, and **Critical**. Select the levels that you want displayed in the log.

Apply Log Settings: Will filter the log results so that only the selected options appear.

Refresh: Updates the log details on the screen so it displays any recent activity.

Clear: Clears all of the log contents.

Email Now: This option will send a copy of the router log to the email address configured in the Tools > Email screen.

Save Log: This option will save the router to a log file on your computer.

D-Link

DIR-628 //

SETUP ADVANCED TOOLS STATUS SUPPORT

DEVICE INFO

LOGS

STATISTICS

INTERNET SESSIONS

WIRELESS

LOGS

Use this option to view the router logs. You can define what types of events you want to view and the event levels to view. This router also has internal syslog server support so you can send the log files to a computer on your network that is running a syslog utility.

Helpful Hints...

Check the log frequently to detect unauthorized network usage.

You can also have the log mailed to you periodically. Refer to [Tools --> EMail](#).

More...

LOG OPTIONS

What to View : Firewall & Security System Router Status

View Levels : Critical Warning Informational

Apply Log Settings Now

LOG DETAILS

Refresh Clear Email Now Save Log

281 Log Entries:

Priority	Time	Message
[WARN]	Sat Jan 31 12:05:37 2004	Blocked packet from 192.168.69.101 to 192.168.69.101 (LAND Attack)
[INFO]	Sat Jan 31 12:01:02 2004	Above message repeated 25 times
[INFO]	Sat Jan 31 12:00:08 2004	Blocked incoming TCP packet from 64.4.23.60:443 to 192.168.69.101:49567 as RST:ACK received but there is no active connection
[WARN]	Sat Jan 31 11:56:36 2004	Blocked packet from 192.168.69.101 to 192.168.69.101 (LAND Attack)
[INFO]	Sat Jan 31 11:47:32 2004	Above message repeated 38 times
[INFO]	Sat Jan 31 11:43:56 2004	Blocked incoming TCP packet from 63.111.24.33:80 to 192.168.69.101:1202 as SYN:ACK received but there is no active connection
[WARN]	Sat Jan 31 11:43:06 2004	Blocked packet from 192.168.69.101 to 192.168.69.101 (LAND Attack)

Stats

The screen below displays the Traffic Statistics. Here you can view the amount of packets that pass through the DIR-628 on both the WAN and the LAN ports. The traffic counter will reset if the device is rebooted.

D-Link

DIR-628 //

SETUP ADVANCED TOOLS STATUS SUPPORT

DEVICE INFO

LOGS

STATISTICS

INTERNET SESSIONS

WIRELESS

TRAFFIC STATISTICS

Traffic Statistics display Receive and Transmit packets passing through your router.

Refresh Statistics Clear Statistics

LAN STATISTICS

Sent : 2495888	Received : 2922256
TX Packets Dropped : 0	RX Packets Dropped : 0
Collisions : 0	Errors : 0

WAN STATISTICS

Sent : 39193	Received : 53732
TX Packets Dropped : 0	RX Packets Dropped : 0
Collisions : 0	Errors : 0

WIRELESS STATISTICS

Sent : 428553	Received : 195327
TX Packets Dropped : 0	RX Packets Dropped : 0
	Errors : 16

Helpful Hints...

This is a summary of the number of packets that have passed between the WAN and the LAN since the router was last initialized.

[More...](#)

WIRELESS

Internet Sessions

The Internet Sessions page displays full details of active Internet sessions through your router. An Internet session is a conversation between a program or application on a LAN-side computer and a program or application on a WAN-side computer.

Local: The IP address and, where appropriate, port number of the local application.

NAT: The port number of the LAN-side application as viewed by the WAN-side application.

Internet: The IP address and, where appropriate, port number of the application on the Internet.

Protocol: The communications protocol used for the conversation.

State: State for sessions that use the TCP protocol:

NO: None -- This entry is used as a placeholder for a future connection that may occur.

SS: SYN Sent -- One of the systems is attempting to start a connection.

EST: Established -- the connection is passing data.

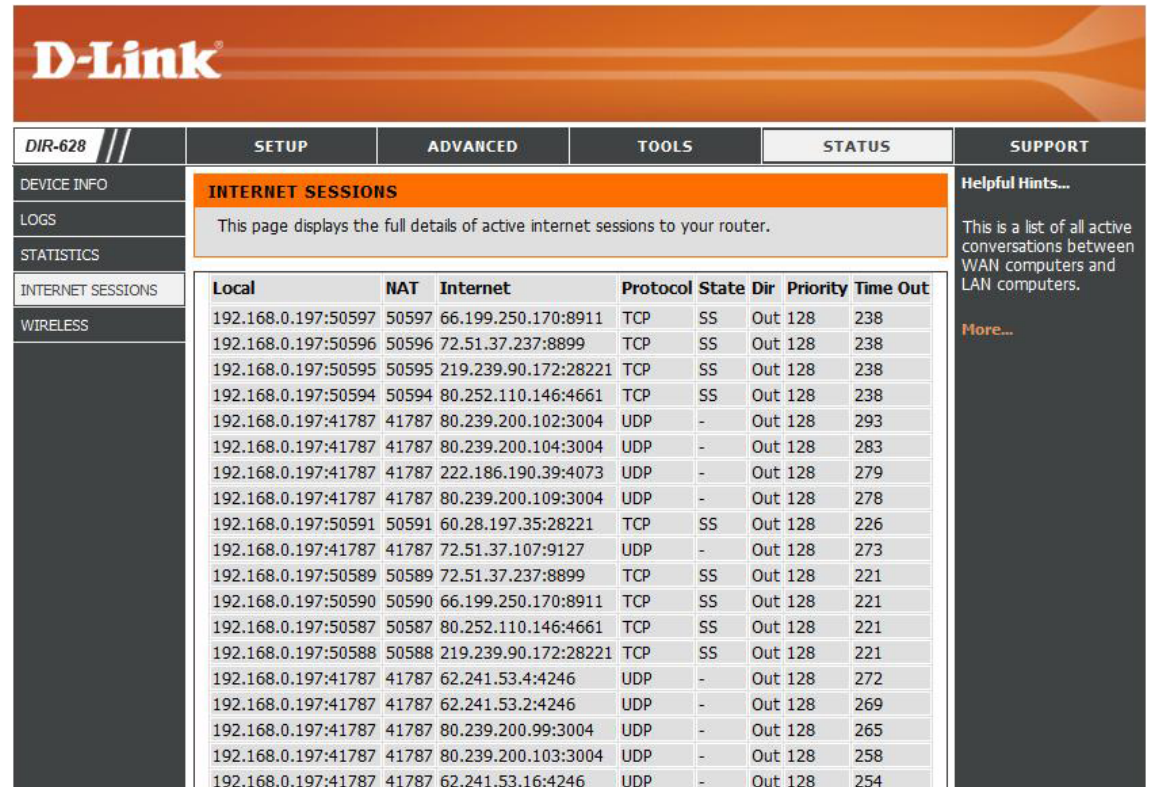
FW: FIN Wait -- The client system has requested that the connection be stopped.

CW: Close Wait -- The server system has requested that the connection be stopped.

TW: Time Wait -- Waiting for a short time while a connection that was in FIN Wait is fully closed.

LA: Last ACK -- Waiting for a short time while a connection that was in Close Wait is fully closed.

CL: Closed -- The connection is no longer active but the session is being tracked in case there are any retransmitted packets still pending.



Local	NAT	Internet	Protocol	State	Dir	Priority	Time Out
192.168.0.197:50597	50597	66.199.250.170:8911	TCP	SS	Out	128	238
192.168.0.197:50596	50596	72.51.37.237:8899	TCP	SS	Out	128	238
192.168.0.197:50595	50595	219.239.90.172:28221	TCP	SS	Out	128	238
192.168.0.197:50594	50594	80.252.110.146:4661	TCP	SS	Out	128	238
192.168.0.197:41787	41787	80.239.200.102:3004	UDP	-	Out	128	293
192.168.0.197:41787	41787	80.239.200.104:3004	UDP	-	Out	128	283
192.168.0.197:41787	41787	222.186.190.39:4073	UDP	-	Out	128	279
192.168.0.197:41787	41787	80.239.200.109:3004	UDP	-	Out	128	278
192.168.0.197:50591	50591	60.28.197.35:28221	TCP	SS	Out	128	226
192.168.0.197:41787	41787	72.51.37.107:9127	UDP	-	Out	128	273
192.168.0.197:50589	50589	72.51.37.237:8899	TCP	SS	Out	128	221
192.168.0.197:50590	50590	66.199.250.170:8911	TCP	SS	Out	128	221
192.168.0.197:50587	50587	80.252.110.146:4661	TCP	SS	Out	128	221
192.168.0.197:50588	50588	219.239.90.172:28221	TCP	SS	Out	128	221
192.168.0.197:41787	41787	62.241.53.4:4246	UDP	-	Out	128	272
192.168.0.197:41787	41787	62.241.53.2:4246	UDP	-	Out	128	269
192.168.0.197:41787	41787	80.239.200.99:3004	UDP	-	Out	128	265
192.168.0.197:41787	41787	80.239.200.103:3004	UDP	-	Out	128	258
192.168.0.197:41787	41787	62.241.53.16:4246	UDP	-	Out	128	254

Dir: The direction of initiation of the conversation:

Out - Initiated from LAN to WAN.

In - Initiated from WAN to LAN.

Priority: The preference given to outbound packets of this conversation by the QoS Engine logic. Smaller numbers represent higher priority.

Time Out: The number of seconds of idle time until the router considers the session terminated. The initial value of Time Out depends on the type and state of the connection.

300 seconds - UDP connections.

240 seconds - Reset or closed TCP connections. The connection does not close instantly so that lingering packets can pass or the connection can be re-established.

7800 seconds - Established or closing TCP connections.