# Configuration

This section will show you how to set up and configure your new D-Link router using the Web-based configuration utility.

### **Web-based Configuration Utility**

#### **Connect to the Router**

To configure the WAN connection used by the router it is first necessary to communicate with the router through its management interface, which is HTML-based and can be accessed using a web browser. The easiest way to make sure your computer has the correct IP settings is to configure it to use the DHCP server in the router. The next section describes how to change the IP configuration for a computer running a Windows operating system to be a DHCP client.

To access the configuration utility, open a web-browser such as Internet Explorer and enter the IP address of the router (**192.168.0.1**).



Type "**admin**" for the **User Name** in the entry field. If this is the first time configuring the router, leave the **Password** field blank, there is no default password.

If you get a **Page Cannot be Displayed** error, please refer to the **Troubleshooting** section for assistance.

Product Page : DIR-320 Firmwa	re Version : 1.00
D-Link	
LOGIN	_
Log in to the router:	
User Name admin	
Password Log In	
WIRELESS	

# **Configure Internet Connection - Setup Wizard**

When you successfully connect to the web manager, the main **Internet Connection** menu displays two options for configuring the Internet connection.

Click on he **Internet Connection Setup Wizard** to quickly configure the Internet connection. The Setup Wizard procedure is described in the pages following this one.

To configure the connection in more detail, click on the Manual Internet Connection Setup button. Manual Internet connection setup is described in Internet Connection - Configure Internet Connection – Manual Setup on page 18 below.

D-Lin	k				$\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{$
DIR-320	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Internet Setup Wireless Setup LAN Setup Printer Setup Time and Date Parental Control Logout Internet Offline Reboot	INTERNET CONNECT If you are configuring to Connection Setup Wiz configure the device so INTERNET CONNECT If you would like to utinew D-Link Systems Ro Note: Before launching Quick Installation Guide MANUAL INTERNET If you would like to co click on the button be	TION the device for the first tim ard, and follow the instruc ettings manually, click the TION SETUP WIZARD lize our easy to use Web- buter to the Internet, clic Internet Connec g the wizard, please make e included in the package. T CONNECTION OPTIC nfigure the Internet settir low. Manual Internet	e, we recommend that you tions on the screen. If you Manual Internet Connection based Wizard to assist you is k on the button below. tion Setup Wizard sure you have followed all DNS hgs of your new D-Link Rou Connection Setup	u click on the Internet wish to modify or n Setup. in connecting your steps outlined in the	Helpful Hints • If you are new to networking and have never configured a router before, click on Internet Connection Setup Wizard and the router will guide you through a few simple steps to get your network up and running. • If you consider yourself an advanced user and have configured a router before, click Manual Internet Connection Setup to input all the settings manually.

### **Internet Connection Setup Wizard**

Use the Internet Connection Setup Wizard to quickly configure the Internet connection.

#### **Setup Wizard**

Click the **Internet Connection Setup Wizard** button and follow the instructions in the menus that appear.

The initial window summarizes the setup process. These steps are as follows:

- 1. Set the new password.
- 2. Select the time zone.
- 3. Configure the connection to the Internet.
- 4. Save settings and reboot the router.

Click the **Next** button to proceed. You may stop using the Setup Wizard at any time by clicking the **Cancel** button. I

Change the administrator account password, enter a new password in the first **Password** entry field, re-type it exactly as before in the Verify Password field, and click **Next**. If you wish to return to the previous window during the setup process, click the **Prev** button.



<b>ink</b>		
STEP 1: SET YOUR PAS	SWORD	
By default, your new D-Link based configuration pages.	Router does not have a password configured for administrator access to the Web- Fo secure your new networking device, please set and verify a password below:	
	Password : ••••••	
	Verify Password :	
	Prev Next Cancel	

Choose the time zone you are in from the pull-down menu and click **Next**. This sets the system time used for the router. If you wish to return to the previous window during the setup process, click the **Prev** button.

### **D-Link**

#### STEP 2: SELECT YOUR TIME ZONE

Select the appropriate time zone for your location. This information is required to configure the time-based options for the router.
(GMT-08:00) Pacific Time (US & Canada); Tijuana

Prev Next Cancel

Select the Internet Connection Type used for the Internet connection. Your ISP has given this information to you. The connection types available are DHCP (Dynamic IP Address), Username/Password (PPPoE), Username/Password (PPTP), Username/Password (L2TP), Username/Password (Bigpond), Static IP Address Connection, Russia PPTP (Dual Access) and Russia PPPoE (Dual Access). Each connection type has different settings that are configured in the next menu

Select the **Connection Type** specific to your service and click **Next**. Follow the instructions below for the type of connection you have selected.

STEP 3: CONFIGURE YOUR	INTERNET CONNECTION
DHCP Connection (Dyn. Choose this if your Internet co this type of connection.	amic IP Address) nnection automatically provides you with an IP Address. Most Cable Modems u
O Username / Password C Choose this option if your Inte modems use this connection t	Connection (PPPOE) rnet connection requires a username and password to get online. Most DSL ype of connection.
Username / Password C Choose this option if your Inte modems use this connection t	 <b>connection (PPTP)</b> rnet connection requires a username and password to get online. Most DSL yoe of connection.
O Username / Password C Choose this option if your Inte modems use this connection t	 <b>connection (L2TP)</b> met connection requires a username and password to get online. Most DSL ype of connection.
O Username / Password C Choose this option if your Inte modems use this connection t	··· <b>connection (Bigpond)</b> rnet connection requires a username and password to get online. Most DSL ype of connection.
Static IP Address Conn Choose this option if your Inte manually configured.	 ection met Setup Provider provided you with IP Address information that has to be
Russia PPTP (Dual Acce Choose this option if your Inter route to access Internet service	ss) rnet connection requires a username and password to get online as well as sta ce provider's internal network.Certain ISPs in Russia use this type of connection
Russia PPPoE (Dual Acc Choose this option if your Inter route to access Internet service	ess) met connection requires a username and password to get online as well as sta ce provider's internal network. Certain ISPs in Russia use this type of connection
	Prev Next Canrel

#### Section 3 - Configuration

**DHCP (Dynamic IP Address)** - For Dynamic IP Address connections, you may want to copy the MAC address of your Ethernet adapter to the router. Some ISPs use the unique MAC address of your computer's Ethernet adapter for identification and for IP address assignment (DHCP) when you first access their network. This can prevent the router (which has a different MAC address) from being allowed access to the ISP's network (and the Internet). To clone the MAC address of your computer's Ethernet adapter, click the **Clone MAC Address** button. Click **Next** to continue.

**Username/Password (PPPoE)** - For PPPoE connections, select the **Address Mode** Dynamic IP or Static IP, type in the **Username** and **Password** used to identify and verify your account to the ISP. Retype the password again and if necessary, type a **Service Name** or domain name. For Static IP address mode, type the IP Address assigned to your account. Your ISP should provide this IP address along with other account information. Click **Next** to continue.



SET USERNAME AND PASSWOR	D CONNECTION (PP	POE)	
To set up this connection you will nee you do not have this information, pleas Address Mode : IP Address : User Name : Password :	d to have a Username ar e contact your ISP. O Dynamic IP O Static	id Password from your Internet Serv	ice Provider. If
Service Name :	lote: You may also need now this information, ple Prev Next Ca	(Optional) to provide a Service Name, If you d vase contact your ISP.	o not have or

**Username/Password (PPTP)** - To configure the PPTP client connection, enter the IP and account information for the router. Your ISP will give this information to you if you are establishing a PPTP connection to the ISP. Click **Next** to continue.

**NOTE:** The broadband device used for your Cable or ADSL network connection must support PPTP pass-through so the VPN session can be established.

**Username/Password (L2TP)** - To configure the L2TP client connection, enter the IP and account information for the router. Your ISP will give this information to you if you are establishing a L2TP connection to the ISP. Click **Next** to continue.

**NOTE:** The broadband device used for your Cable or ADSL network connection must support L2TP pass-through so the VPN session can be established.

SET US	RNAME AND PASSW	ORD CONNEC	CTION (PPTP	l.		
To set up	this connection you will	need to have a	Username and f	assword from	your Internet Service	Provider.
You also	need PPTP IP adress. If y	ou do not have	this information	please contac	t your ISP.	
	A	ddress Mode :	💿 Dynamic IP	⊖Static IP		
	PPT	P IP Address :				
	PPTP 9	Subnet Mask :				
	PPTP Gatewa	y IP Address :				
	PPTP Serv (may be same	er IP Address as gateway) :				
		User Name :				
		Password :	•••••			
	Ver	fy Password :	•••••			

SET USERNAME AND PASSWORE	D CONNECTION (L2TP)
To set up this connection you will need You also need L2TP IP adress. If you do	I to have a Username and Password from your Internet Service Provide o not have this information, please contact your ISP.
Address Mode	: O Dynamic IP O Static IP
L2TP IP Address	:
L2TP Subnet Mask	:
L2TP Gateway IP Address	:
L2TP Server IP Address	s
(may be same a: gateway)	s
User Name	:
Password	: •••••
Verify Password	: •••••
	Prev Next Cancel

**Username/Password (Bigpond)** - BigPond Cable connections use this Enter the account and server information, as provided to you by BigPond. Click **Next** to continue.

	(DIGFOND)
set up this connection you will need to have a Userna u also need BigPond IP adress. If you do not have this	ame and Password from your Internet Service Provider. ; information, please contact your ISP.
Auth Server : s	sm-server 🔽
Bigpond Server IP Address (may be same as gateway) :	
Bigpond User Name :	
Bigpond Password :	•••••
Bigpond Verify Password : •	•••••
(may be same as gateway) : Bigpond User Name : Bigpond Password : Bigpond Verify Password :	

Static IP Address Connection - For Static IP Address connection types, you must type in the IP Address, Subnet Mask, Gateway Address, Primary DNS Address and Secondary DNS Address (optional). Your ISP should provide this information to you. Click Next to continue.

SET STATIC	P ADDRESS CONNECTION
To set up this o Provider. If you	onnection you will need to have a complete list of IP information provided by your Internet Service have a Static IP connection and do not have this information, please contact your ISP.
	IP Address :
	Subnet Mask :
	Gateway Address :
	Primary DNS Address :
5	acondary DNS Address :

**Russia PPTP (Dual Access)** - To configure the PPTP client connection, enter the IP and account information for the router. Your ISP will give this information to you if you are establishing a PPTP connection to the ISP. Click **Next** to continue.

**NOTE:** The broadband device used for your Cable or ADSL network connection must support PPTP pass-through so the VPN session can be established.

**Russia PPPoE (Dual Access)** - For PPPoE connections, select the **Address Mode** Dynamic IP or Static IP, type in the **Username** and **Password** used to identify and verify your account to the ISP. Retype the password again and if necessary, type a **Service Name** or domain name. For Static IP address mode, type the IP Address assigned to your account. Your ISP should provide this IP address along with other account information. An additional set of IP settings might be required to create a static route to the ISP. Enter the WAN IP settings used to create this route (as given by the ISP) and click **Next** to continue.

SET	USERNAME AND P	ASSWORD CONN	ECTION (PPTP	)		
To : You	et up this connection y also need PPTP IP adre	ou will need to have iss. If you do not hav	a Usemame and P e this information	assword from yo , please contact	our Internet Service Provic your ISP.	der.
		Address Mode	: 💿 Dynamic IP	OStatic IP		
		PPTP IP Address				
		PPTP Subnet Mask	:			
	PPTP G	ateway IP Address	:		-	
	PPT (may be	P Server IP Addres	s.			
	(indy be	User Name			7	
		Password			Ī	
		Verify Password			1	
		_		-		

OFT HEEPNAME AND BACOWO		
SET USERMANE AND PASSHU	RD CONNECTION (PP)	POE)
To set up this connection you will ne	ed to have a Username ar	nd Password from your Internet Service Provider. 1
you do not have this information, pie	ase contact your ISP.	
Address Mode :	Opriamic IP OStatic	IP
IP Address :		
User Name :		
Password :		
Verify Password :	•••••	
Service Name :		(Optional)
	know this mormation, pe	sine contact your tap.
WAN Physical Setting :		
WAN Physical Setting :	⊙Dynamic IP ⊖State	c IP
WAN Physical Setting : IP Address :	Opynamic IP OStatio	c IP
WAN Physical Setting : IP Address : Subnet Mask :	Oyramic IP O State	c IP
WAN Physical Setting : IP Address : Subnet Mask : Gateway :	Opynamic IP O State	c JP
WAN Physical Setting : IP Address : Subnet Mask : Gateway : Primary DNS Address :	Opynamic IP O State	c p
WAN Physical Setting : IP Address : Subnet Mask : Gateway : Primary DNS Address : Secondary DNS Address :	Oynamic IP O Statk     Oynamic IP (Option     Option     (Option	c (p onal)

#### Section 3 – Configuration

When you are satisfied that the settings have been entered correctly click on the **Connect** button to save the new configuration settings.

D-Link	
SETUP COMPLETE!	
The Setup Wizard has completed. Click the Connect button to save your settings and reboot the router.	
Prev Connect Cancel	
WIRELESS	

During the save and restart procedure, the display informs that it is rebooting. Once the reboot is complete, begin to use the router.

D-Link	
REBODTING Saving Changes and Restarting. If you changed the IP address of the router you will need to change the IP address in your browser before accessing the configuration Web site again.	
WIRELESS	

# **Configure Internet Connection – Manual Setup**

The Internet connection can be configured manually without using the Setup Wizard. To configure Internet connection settings manually click on the **Manual Internet Connection Setup** button in the Internet Connection menu.

In the new menu select the **Internet Connection** type used for your service from the **My Internet Connection is:** pull-down menu. Follow the instructions in the next sections according to the type of Internet connection you want to configure.

SETUP	ADVANCED	MAINTENANCE	STATUS
INTERNET CONNEC	TION		
If you are configuring Connection Setup Wiz configure the device s	the device for the first tim ard, and follow the instruc ettings manually, click the	e, we recommend that you tions on the screen. If you Manual Internet Connectio	u click on the Internet wish to modify or n Setup.
INTERNET CONNEC	TION SETUP WIZARD		
If you would like to ut new D-Link Systems R	ilize our easy to use Web-b outer to the Internet, click Internet Connect	based Wizard to assist you i < on the button below. tion Setup Wizard	n connecting your
Note: Before launchin Quick Installation Guide	g the wizard, please make e included in the package.	sure you have followed all	steps outlined in the
MANUAL INTERNE	T CONNECTION OPTIO	INS	
If you would like to co click on the button be	nfigure the Internet settir low. Manual Internet	ngs of your new D-Link Rou Connection Setup	iter manually, then

### **Dynamic IP Address**

To configure a Dynamic IP Address Internet connection, follow these steps:

- 1. Select the *Dynamic IP (DHCP)* option from the **My Internet Connection is:** pull-down menu.
- Under the Dynamic IP heading, type a Host Name if needed, and DNS IP address information. The Primary DNS Address will be normally be required, the Secondary DNS Address is used for a back up DNS server.
- 3. Some ISPs record the unique MAC address of your computer's Ethernet adapter when you first access their network. This can prevent the Router (which has a different MAC address) from being allowed access to the ISPs network (and the Internet). To clone the MAC address of your computer's Ethernet adapter, type in the MAC address in the MAC Address field and click the Clone MAC Address button.
- 4. Leave the **MTU** value at the default setting (default = *1500*) unless you have specific reasons to change this (see table below for more information).
- 5. Click on the Save Settings button to save and apply the new Internet connection settings.

A Dynamic IP Address connection configures the Router to automatically obtain its global IP address from a DHCP server on the ISP's network.

DYNAMIC IP (DHCP) INTERNET CONNECTION TYPE
Use this Internet connection type if your Internet Service Provider (ISP) didn't provide you with IP Address information and/or a username and password.
Host Name : DIR-320
MAC Address :
Primary DNS Address :
Secondary DNS Address : (optional)
MTU: 1500
Save Settings Don't Save Settings

### **Static IP Address**

To configure a Static IP type Internet connection, follow these steps:

- 1. Select the *Static IP* option from the **My Internet Connection is:** pull-down menu.
- 2. Under the Static IP heading, type IP address information provided by your ISP, type an IP Address, Subnet Mask and ISP Gateway Address. The Primary DNS Address will be normally be required, the Secondary DNS Address is used for a back up DNS server.
- 3. Some ISPs record the unique MAC address of your computer's Ethernet adapter when you first access their network. This can prevent the Router (which has a different MAC address) from being allowed access to the ISPs network (and the Internet). To clone the MAC address of your computer's Ethernet adapter, type in the MAC address in the MAC Address field and click the Clone MAC Address button.
- 4. Leave the **MTU** value at the default setting (default = *1500*) unless you have specific reasons to change this (see table below for more information).
- 5. Click on the Save Settings button to save and apply the new Internet connection settings.

When the Router is configured to use Static IP Address assignment for the Internet connection, you must manually assign a global IP Address, Subnet Mask, and ISP Default Gateway IP address. Most users will also need to configure DNS server IP settings. Follow the instruction below to configure the Router to use Static IP Address assignment for the Internet connection.

#### STATIC IP ADDRESS INTERNET CONNECTION TYPE

Enter the static address information provided by your Internet Service Provider (ISP).

- Clone MAC Address	
(optional)	

### PPPoE

PPP or Point-to-Point protocol is a standard method of establishing a network connection/session between networked devices. Different forms of PPP include PPPoA and PPPoE (discussed below) involve an authentication process that requires a username and password to gain access to the network. PPPoE (PPP over Ethernet), as described in RFC 2516, is a method of using PPP through the Ethernet network.

To configure a PPPoE Internet connection, follow these steps:

- 1. Select the *PPPoE (Username / Password)* option from the **My Internet Connection is:** pull-down menu.
- 2. Choose the IP address assignment option (Dynamic PpoE or Static PPPoE). Static IP address assignment requires manual entry of IP settings information.
- 3. Under the **PPPoE** heading, type the **User Name** and **Password** used for your account. A typical User Name will be in the form user1234@isp.co.ru. The Password may be assigned to you by your ISP or you may have selected it when you set up the account with your ISP. Type the password again in **Confirm Password**.
- 4. For Static PPPoE connections, enter IP settings provided by the ISP and, if necessary enter MAC address (see table below)
- 5. Leave the **MTU** value at the default setting (default = 1492) unless you have specific reasons to change this (see table below for more information).
- 6. Choose the desired **Connection Setting**. Select from: Always ON, Connection On Demand, or Manual. Most users will want to choose the default connection setting, Always ON.

PPPOE	
Enter the information provide	d by your Internet Service Provider (ISP).
	⊙ Dynamic PPPoE ○ Static PPPoE
User Name :	
Password :	•••••
Retype Password :	•••••
Service Name :	(optional)
IP Address :	
MAC Address :	-     -     -       (optional)     Clone MAC Address
Primary DNS Address :	
Secondary DNS Address :	(optional)
Maximum Idle Time :	5 Minutes
MTU :	1492
Connect mode select :	Always     Add New     Add New     Omanual     Connect-on demand
Save Settings Don't S	ave Settings

See table below for parameter description.

#### Section 3 – Configuration

Some of the settings do not need to be changed the first time the device is set up, but can be changed later if you choose. The information that is to be provided in this window must be given to you by your ISP and must be carefully configured. Any small discrepancy will send the wrong message to your ISP's server and inhibit your connection.

There are two ways to configure the PPoE connection on the router, one is for a **Dynamic PPPoE** configuration, which means the router will implement some settings automatically through DHCP, such as the router's IP address and the default gateway. The other is through a **Static PPPoE** connection, in which the user must configure the IP address and the DNS addresses automatically.

PPPoE	Description
User Name	The user name supplied to you by your ISP.
Password	The password supplied to you by your ISP.
Retype Password	Retype the password entered in the Password feld.
Service Name	Enter the service name supplied to you by your ISP, if required.
IP Address	Enter the IP address given to you by your ISP. This field is only to be completed if the Static PPPoE button is selected.
MAC Address	This field will instruct the user to enter the Media Access Control (MAC) address of the Ethernet Card of your computer, if instructed to do so by your ISP. To quickly accomplish this, click the <b>Clone MAC address</b> button, which will automatically copy the MAC address of your Ethernet card and enter it into the space provided, which will replace the MAC address of the router.
Primary DNS Address	This entry is for the IP address of your primary domain name server, which should also be provided to you by your ISP. The router will first try the Primary DNS Address to resolve a website's URL IP address. If this IP address fails, the router will then try the Secondary DNS Address. This field is only to be completed if the Static PPPoE button is selected.
Secondary DNS Address	The IP address of the secondary domain name server will be used to resolve a website's URL IP address if the Primary DNS Address fails. The information in this field should also be provided by your ISP and is only to be completed if the Static PPPoE button is selected.
Maximum Idle Time	A value of 0 means that the PPP connection will remain connected. If your network account is billed according to the amount of time the Router is actually connected to the Internet, enter an appropriate Idle Time value (in seconds). This will disconnect the Router after the WAN connection has been idle for the amount of time specified. The default value = 5.
MTU	This field refers to the Maximum Transfer Unit, which is the maximum size of a packet, in bytes, that will be accepted by the router. The default setting is 1492 bytes. This field should not be altered unless instructed by your ISP.
Connect Mode Select	This function, with <b>Connect-on-demand</b> selected, will allow the router to connect any workstation on your LAN to the Internet upon request. If this function is set at <b>Always-on</b> , no request from the workstation will be needed to connect to the Internet. If <b>Manual</b> is selected, it will be necessary for the workstation on the LAN to manually connect to the Internet through this router.

### PPTP

The Point to Point Tunneling Protocol is used to transfer information securely between VPNs (Virtual Private Routers). Encryption methods are employed in the transfer of information between you and your ISP using a key encryption. This option is specific for European users where ISPs support the PPTP protocol for the uplink connection. To connect to your ISP's server using this protocol, the information in this window must be provided to you by your ISP and then properly implemented.

There are two ways to enable the router to become a PPTP client, one is through assigning the router an IP address dynamically, which means that the DHCP protocol will be implemented by the Router to automatically configure the IP settings. The user may input the IP settings manually by choosing the Static IP option above the configuring area. To configure the router to be a PPTP client, complete the entry fields and click the **Save Settings** button.

рртр	
Enter the information provide	ed by your Internet Service Provider (ISP).
	NAL CONTRACTOR
	💿 Dynamic IP 🔘 Static IP
IP Address :	(assigned by your ISP)
Subnet Mask :	
Gateway :	
DNS :	
MAC Address :	(optional) Clone MAC Address
Server IP/Name :	
PPTP Account :	
PPTP Password :	•••••
PPTP Retype Password :	•••••
Maximum Idle Time :	5 Minutes
MTU :	1400
Connect mode select :	<ul> <li>○ Always ○ Add New</li> <li>○ Manual ○ Connect-on demand</li> </ul>
Save Settings Don't S	ave Settings

See table below for parameter description.

#### Section 3 – Configuration

PPTP/L2TP	Description
IP Address	Enter the IP address of the router into this field. This address must be supplied to you by your ISP. This field will not be necessary to configure if the Dynamic IP option is chosen above the configuring field.
Subnet Mask	Enter the IP address of the Subnet Mask into this field. This address must be supplied to you by your ISP. This field will not be necessary to configure if the Dynamic IP option is chosen above the configuring field.
Gateway	Enter the IP address of the gateway into this field. This address must be supplied to you by your ISP. This field will not be necessary to configure if the Dynamic IP option is chosen above the configuring field.
DNS	Enter the IP address of the DNS. This field will not be necessary to configure if the Dynamic IP option is chosen above the configuring field.
MAC Address	This field will instruct the user to enter the Media Access Control (MAC) address of the Ethernet Card of your computer, if instructed to do so by your ISP. To quickly accomplish this, click the <b>Clone MAC address</b> button, which will automatically copy the MAC address of your Ethernet card and enter it into the space provided, which will replace the MAC address of the router.
Server IP/Name	Enter the Server IP address for this protocol into this field. This is the IP address of the server computer that will be used, along with your computer, to create the Virtual Private Network. This field must be completed for both the Dynamic IP and Static IP options
PPTP/L2TP Account	Enter the PPTP/L2TP account name, provided to you by your ISP, here.
PPTP/L2TP Password	Enter your password for this PPTP/L2TP account here, as stated to you by your ISP.
PPTP/L2TP Retype Password	Retype the password entered in the <b>PPTP/L2TP Password</b> field.
Maximum Idle Time	A value of 0 in this field means that the PPTP/L2TP connection will remain connected. If your network account is billed according to the amount of time the Router is actually connected to the Internet, enter an appropriate Idle Time value (in seconds). This will disconnect the Router after the WAN connection has been idle for the amount of time specified. The default value = 5.
МТО	This field refers to the Maximum Transfer Unit, which is the maximum size of a packet, in bytes, that will be accepted by the router. The default setting is 1460 bytes. This field should not be altered unless instructed by your ISP.
Connect Mode Select	This function, with <b>Connect-on-demand</b> selected, will allow the router to connect any workstation on your LAN to the Internet upon request. If this function is set at <b>Always-on</b> , no request from the workstation will be needed to connect to the Internet. If <b>Manual</b> is selected, it will be necessary for the workstation on the LAN to manually connect to the Internet through this router.

## L2TP

L2PT, or Layer 2 Tunneling Protocol is a VPN protocol that will ensure a direct connection to the server using an authentication process that guarantees the data originated from the claimed sender and was not damaged or altered in transit. Once connected to the VPN tunnel, it seems to the user that the client computer is directly connected to the internal network. To set up your L2PT connection, enter the data that was provided to you by your ISP.

There are two ways to enable the router to become a L2TP client, one is through assigning the router an IP address dynamically, which means that the DHCP protocol will be implemented by the Router to automatically configure the IP settings. The user may input the IP settings manually by choosing the Static IP option above the configuring area. To configure the router to be a L2TP client, complete the following fields and click the **Save Settings** button.

L2TP	
Enter the information provided I	by your Internet Service Provider (ISP).
0	Oynamic IP 🔘 Static IP
IP Address :	(assigned by your ISP)
Subnet Mask :	
Gateway :	
DNS :	
MAC Address :	
Server IP/Name :	
L2TP Account :	
L2TP Password :	•••••
L2TP Retype Password : 💿	•••••
Maximum Idle Time : 5	Minutes
MTU : 14	400
Connect mode select :	Always Add New Add New Manual  Connect-on demand
Save Settings Don't Save	e Settings

See table on previous page for parameter description.

## BigPond

BigPond Cable connections use this menu to configure account and connection information. Enter the account information, as provided to you by BigPond. Click **Next** to continue.

BigPond Connection Setting	Description
Auth Server	Enter the name of the Authentication Server as provided to you by BigPond.
User Name	The account name of the account that has been assigned to you by BigPond.
Password	The password of the account that was supplied to you by BigPond.
Confirm Password	Retype the password that was entered in the BigPond Password field. Ensure that these two passwords are identical or an error will occur.
Login Server IP/Name	Enter the Server IP address for this protocol into this field. This is the IP address of the server computer that will be used, along with your computer, to create the Virtual Private Network. This field must be completed for both the Dynamic IP and Static IP options
MAC Address	This field will instruct the user to enter the Media Access Control (MAC) address of the Ethernet Card of your computer, if instructed to do so by your ISP. To quickly accomplish this, click the <b>Clone MAC address</b> button, which will automatically copy the MAC address of your Ethernet card and enter it into the space provided, which will replace the MAC address of the router.

BIGPOND
---------

Enter the information provided by your Internet Service Provider (ISP).

Password :	•••••	
Retype Password :	•••••	
Auth Server :	sm-server 💌	
.ogin Server IP/Name :		(optional)
MAC Address :	optional)	

### **PPTP** Russia

The PPTP Russia setup is identical to the previously described PPTP setup on page 23 except an option to use a MAC address that will always be associated with the connection. The MAC address is entered manually or copied form the computer.

To configure a PPTP Russia Internet connection, configure as previously described for PPTP connections and type in the MAC address that will be used or clone the computer's MAC address by clicking on the **Clone MAC Address** button.

#### RUSSIA PPTP (DUAL ACCESS)

Enter the information provided by your Internet Service Provider (ISP).

	💿 Dynamic IP 🔘 Static IP
IP Address	: (assigned by your ISP)
Subnet Mask	
Gateway	
DNS	
MAC Address	(optional) Clone MAC Address
Server IP/Name	
PPTP Account	
PPTP Password	••••••
PPTP Retype Password	••••••
Maximum Idle Time	5 Minutes
MTU	: 1400
Connect mode select	<ul> <li>Always Add New</li> <li>Manual O Connect-on demand</li> </ul>
Connect mode select	Manual O Connect-on demand

### **PPPoE** Russia

Some PPPoE connections use a static IP route to the ISP in addition to the global IP settings for the connection. This requires an added step to define IP settings for the physical WAN port.

To configure a PPPoE Russia Internet connection, configure as previously described for PPPoE connections on page 21 and add the WAN Physical IP settings as instructed from the ISP.

RUSSIA PPPOE (DUAL #	ACCESS)
Enter the information provide	ed by your Internet Service Provider (ISP).
	Opynamic PPPoE     Ostatic PPPoE
User Name :	
Password :	•••••
Retype Password :	•••••
Service Name :	(optional)
IP Address :	
MAC Address : _	
	(optional) Clone MAC Address
Primary DNS Address :	
Secondary DNS Address :	(optional)
Maximum Idle Time :	5 Minutes
MTU :	1492
Connect mode select :	Always Add New
	Manual Connect-on demand
WAN PHYSICAL SETTIN	G
Diam	
Primary	
Secondary	UNS Address :(optional)
Save Settings Don't S	ave Settings

# **Configure Wireless Connection - Setup Wizard**

Configure the router's wireless access point with the **Wireless Connection Setup Wizard** and follow the instructions that follow. Or use the manual configuration option. To configure basic wireless and wireless security settings manually click on the **Manual Wireless Connection Setup** button.

SETUP	ADVANCED	MAINTENANCE	STATUS
WIRELESS CONNEG	TION		
There are 2 ways to se wizard or you can man Please note that cha wireless clients and I	etup your wireless connec ually configure the connec anges made on this sect PC.	tion. You can use the Wire :tion. t <b>ion will also need to be</b>	eless Connection Setup
WIRELESS CONNEC	CTION SETUP WIZARI	D .	
If you would like to uti new D-Link Systems W	lize our easy to use Web-b ireless Router to the Inter Wireless Connect	based Wizard to assist you rnet, click on the button b tion Setup Wizard	in connecting your elow.
Note: Before launching Quick Installation Guide	g the wizard, please make e included in the package.	sure you have followed all	steps outlined in the
MANUAL WIRELES	S CONNECTION OPTI	DNS	
If you would like to co click on the button be	nfigure the Internet settin ow. Manual Wireless (	ngs of your new D-Link Rou Connection Setup	uter manually, then

#### **Wireless Connection Setup Wizard**

Use the Wireless Connection Setup Wizard to quickly configure the Internet connection. Click on the **Wireless Connection Setup Wizard** button in the Wireless Connection menu to begin using the wizard.

The first wizard menu provides a summary of the setup procedure. The procedure is the same for all security types used. If you want to make specific changes to wireless security settings, use the manual wireless connection setup option. The steps for wireless connection setup are:

- 1. Name your wireless network
- 2. Secure your wireless network
- 3. Set your wireless security password

Click the **Next** button to proceed.



Type the SSID or name of your wireless network and click Next to
proceed. Any wireless client or device that associates with the router must
have this SSID.

D-Link	
STEP 1: NAME YOUR WIRELESS NETWORK	
Your wireless network needs a name so it can be easily recognized by wireless clients. For security highly recommended to change the pre-configured network name of [dlink].	/ purposes, it is
Wireless Network Name (SSID)	
Prev Next Cancel	
WIRELESS	

#### Section 3 – Configuration

Select the level of security for the wireless network. The choice will determine the method used for security. The security options are:

- Best using WPA2
- Better using WPA
- Good using WEP
- None no security for the wireless connection

Remember that all wireless clients that will associate with the router must use the same security settings.

Click **Next** to continue to proceed.

Type the password used for security. The password will be converted into
the appropriate form used with the security option chosen before.
Click <b>Next</b> to continue to proceed.

nk
STEP 2: SECURE YOUR WIRELESS NETWORK
This wizard will guide you through a step-by-step process to configure your new D-Link router and connect to the Internet.
In order to protect your network from hackers and unauthorized users, it is highly recommended you choose one of the following wireless network security settings.
There are three levels of wireless security -Good Security, Better Security, or Best Security. The level you choose depends on the security features your wireless adapters support.
BEST 🔘 Select this option if your wireless adapters SUPPORT WPA2
BETTER 🔘 Select this option if your wireless adapters SUPPORT WPA
GOOD 🔘 Select this option if your wireless adapters DO NOT SUPPORT WPA
NONE $\odot$ Select this option if you do not want to activate any security features
For information on which security features your wireless adapters support, please refer to the adapters' documentation.
Note: All D-Link wireless adapters currently support WPA.
Prev Next Cancel
55



#### Section 3 – Configuration

Wireless setup is completed. Review the wireless settings SSID and security information. It is a good idea to keep a record of the wireless settings in order to configure clients that will associate with the router.

Click **Next** to continue to save the new wireless settings and restart the router.

SETUR	COMPLETE!
Below i on a pi	a detailed summary of your wireless security settings. Please print this page out, or write the information ice of paper, so you can configure the correct settings on your wireless client adapters.
	Wireless Network Name (SSID) : dlink
	Prev Save Cancel

Restarting will take several seconds. Once the router has restarted the wireless settings just configured will be applied.

D-Li	ink	
	REBOOTING Saving Changes and Restarting.	
WIREL	ESS	

# **Wireless Connection – Manual Setup**

The wireless connection can be configured manually without using the Setup Wizard. To configure wireless connection settings manually click on the **Manual Wireless Connection Setup** button in the Wireless Connection menu.

The two essential settings for wireless LAN operation are the **Wireless Network Name** or SSID and **Wireless Channel** number. The SSID (Service Set Identifier) is used to identify a group of wireless LAN components. The SSID can be broadcast in order to allow properly configured wireless stations to learn the SSID and join the group.

SETUP	ADVANCED	MAINTENANCE	STATUS
WIRELESS CONNEC	DTION		
There are 2 ways to so wizard or you can man Please note that cha wireless clients and l	etup your wireless connec ually configure the connec anges made on this sect PC.	tion. You can use the Wire tion. t <b>ion will also need to be</b>	eless Connection Setup
WIRELESS CONNEC	CTION SETUP WIZARI	D	
If you would like to uti new D-Link Systems W <b>Note:</b> Before launching Quick Installation Guide	lize our easy to use Web-ł ireless Router to the Inte <u>Wireless Connec</u> g the wizard, please make e included in the package.	based Wizard to assist you rnet, click on the button b tion Setup Wizard sure you have followed all	in connecting your elow. steps outlined in the
MANUAL WIRELES	S CONNECTION OPTI	ONS	
If you would like to co click on the button be	nfigure the Internet settir low. Manual Wireless	ngs of your new D-Link Rou Connection Setup	iter manually, then

#### **Wireless Network Settings**

Use the **Enable Wireless** check box to disable or enable the wireless interface. Wireless function is enabled by default.

The **Wireless Network Name** or SSID can be changed to suit your wireless network. Remember that any wireless device using the access point must have the same SSID and use the same channel. The SSID can be a continuous character string (i.e. no spaces) of up to 16 characters in length.

Wireless stations that support WPS can be configured automatically using the Wi-Fi Protected Setup menu.

To manually configure security settings, select the **Wireless Security Mode** form the pull-down menu and configure the settings for the security method used. Follow the instructions below for the type of security used.

Click the **Save Settings** button to save any changes to the wireless network settings.

WI-FI PROTECTED SETUP (ALSO CALLED WCN 2.0 IN WINDOWS VISTA)
Enable : Current PIN : <b>33473918</b> Generate New PIN Reset PIN to Default Wi-Fi Protected Status : Enabled / Configured Reset to Unconfigured Add Wireless Device with WPS
WIRELESS NETWORK SETTINGS
Enable Wireless : Wireless Network Name : dlink (Also called the SSID) Enable Auto Channel Selection : Wireless Channel : 6 Transmission Rate : Best (automatic) (Mbit/s) WMM Enable : (Wireless QoS) Enable Hidden Wireless : (Also called the SSID Broadcast)
Security Mode : Enable WEP Wireless Security (basic)
WEP
<ul> <li>WEP is the wireless encryption standard. To use it you must enter the same key(s) into the router and the wireless stations. For 64 bit keys you must enter 10 hex digits into each key box. For 128 bit keys you must enter 26 hex digits into each key box. A hex digit is either a number from 0 to 9 or a letter from A to F. For the most secure use of WEP set the authentication type to "Shared Key" when WEP is enabled.</li> <li>You may also enter any text string into a WEP key box, in which case it will be converted into a hexadecimal key using the ASCII values of the characters. A maximum of 5 text characters can be entered for 64 bit keys, and a maximum of 13 characters for 128 bit keys.</li> </ul>
Authentication : Open WEP Encryption : 1288it Default WEP Key : WEP Key 1 WEP Key : 11111e0a (13 ASCII or 26 HEX)
Save Settings Don't Save Settings

### Wi-Fi Protected Setup

Wi-Fi Protected Setup or WPS makes wireless security configuration much quicker simpler for wireless stations that support this feature.



NOTE: The Generate New PIN button is for the Router's own PIN. This is used when the Router needs to connect to other WPS enabled access points.

To connect a new wireless station with WPS, click on the **Add Wireless Device with WPS** button. A new menu appears.

There are two methods available to connect a WPS wireless station, a manual PIN entry or automatic method.

To use the PIN entry method, type the new station's PIN number in the space provided and click on the **Connect** button. The router begins searching the wireless network for the device. Now begin the WPS connection procedure with the device attempting connection. The router will search for 120 seconds. If it fails to find the device, a message appears explaining that the WPS connection failed.

To use the automatic WPS method, click on the **Virtual Push Button**. The router begins searching the wireless network for the device. Now begin the WPS connection procedure with the device attempting connection. The router will search for 120 seconds. If it fails to find the device, a message appears explaining that the WPS connection failed.



ADD WIRELESS DEVICE WITH WPS
There are two ways to add wireless device to your wireless network: PIN number or Push Button.
If the wireless device you are adding to your wireless network only comes with a PIN number, enter its PIN number below to add this device to your wireless network.
PIN : Connect
If the wireless device you are adding to your wireless network has both options available, you may use the Virtual Push Button if you prefer.
PUSH BUTTON : Virtual Push Button
(The Virtual Push Button acts the same as the physical Push Button on the router)
VIRTUAL PUSH BUTTON
Please press down the Push Button (physical or virtual) on the wireless device you are adding to your wireless

network within 116 seconds ...

### Wireless Security - WEP

WEP security requires the following parameters be defined:

- Authentication: Select Open Key or Shared Key.
- Encryption: Select the encryption level, 64-bit or 128-bit.
- **Default WEP Key:** Up to four keys can be configured. Choose the key being configured.
- WEP Key: Type an ASCII or Hex key of appropriate length for the encryption level, 10 characters for 64-bit Hex or 26 characters for 128-bit Hex.

Click the **Save Settings** button to save any changes to the wireless network security settings.



**NOTE:** If encryption of any kind, at any level is applied to the router, all wireless devices using the router on the network must comply with all security measures.

	Security Mode :	Enable WEP Wireless Security (	basic) 💌
WEP			
WEP is the wireless e router and the wirele For 128 bit keys you from 0 to 9 or a lette to "Shared Key" whe You may also enter a hexadecimal key usin be entered for 64 bit	Incryption standard Ins stations. For 64 must enter 26 he) In from A to F. For In WEP is enabled. In text string into g the ASCII values t keys, and a maxin	d. To use it you must enter t bit keys you must enter 10 l ( digits into each key box. A l the most secure use of WEP a WEP key box, in which cas of the characters. A maximu num of 13 characters for 128	he same key(s) into the hex digits into each key box, hex digit is either a number set the authentication type te it will be converted into a m of 5 text characters can bit keys.
	Authentication ;	Open	
	WEP Encryption ;	128Bit 💌	
C	efault WEP Key ;	WEP Key 1 💌	

### Wireless Security – WPA/EAP

Wi-Fi Protected Access was designed to provide improved data encryption, perceived as weak in WEP, and to provide user authentication, largely nonexistent in WEP.

Enter the appropriate parameters for the type of security selected from this menu. WPA EAP or WPA2 EAP must enter the following:

- Cypher Type: Choose TKIP, AES or Both.
- **PSK/EAP:** Choose EAP.
- **RADIUS Server IP Address:** The IP address of the RADIUS server.
- **Port:** The port number used for 802.1x.
- **Shared Secret:** The password or character string used for wireless station authentication.

	Security Mode :	Enable WPA Only Wireless Security (enhanced)
WPA ONLY		
WPA Only requires sta	ations to use high	grade encryption and authentication.
002.12	Cipher Type ; PSK / EAP ;	Both V EAP V
RADIUS Serve	r IP Address : Port : Shared Secret :	

### Wireless Security – WPA/PSK

Enter the appropriate parameters for the type of security from this menu. WPA-PSK or WPA2-PSK must enter the following:

- Cypher Type: Choose TKIP, AES or Both.
- **PSK/EAP:** Choose PSK.
- **Network Key:** The password or character string used for wireless station authentication (10 characters for 64-bit Hex).

WIRELESS SECURITY MODE	
Security Mode ;	Enable WPA Only Wireless Security (enhanced)
WPA ONLY	
WPA Only requires stations to use high	grade encryption and authentication.
Cipher Type ;	TKIP 💌
PSK / EAP :	PSK 💌
Network Key :	(8~63 ASCII or 64 HEX)
Save Settings Don't Save Setting:	