



Setting up a RemoteVPN Account

The RemoteVPN is a service offered by Contemporary Controls that allows systems integrators remote access to systems from the convenience of the systems integrator's home or office. A cloud-based VPN server hosted by Contemporary Controls provides the critical connection between two VPN clients—one installed on the systems integrator's PC and the other permanently installed on Contemporary Controls' VPN router located at the remote location. Using this approach, two secure VPN tunnels are created with no concern for intervening firewalls.

RemoteVPN is based on OpenVPN®, a well-supported open-source VPN technology that incorporates SSL/TLS security with encryption. In addition to OpenVPN PC clients for Windows machines, OpenVPN clients are available for iOS and Android mobile devices for greater flexibility in accessing sites remotely.

The RemoteVPN account is accessible at <https://www.remotevpnserver.com>.

Splash Screen



Connections Screen

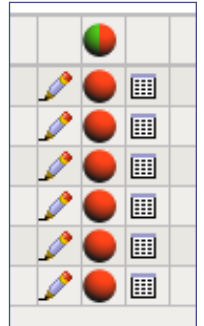
Log in with the **username/password** provided after account setup. After logging in, the screen shows the devices in the current group. For example, the image below shows two routers and three road warrior clients in this group. It also shows the VPN addresses for accessing the routers (and their LAN devices) and the LAN addresses of the routers.

Name	group	VPN Addr.	LAN Addr.
ccsi-router01	ccsi-test01	10.0.2.0/24	192.168.92.0/24
ccsi-router02	ccsi-test01	10.0.3.0/24	192.168.92.0/24
ccsiroadwarrior01	ccsi-test01		
ccsiroadwarrior02	ccsi-test01		
ccsiroadwarrior03	ccsi-test01		
Jason	ccsi-test01		
Configs	ccsi-test01.zip		

Connections Status Options

Each connection (row) has the following three icons:

- A **pencil icon** – click it to **edit** the connection.
- A **colored ball** indicates the connection status – red for **offline** and green for **online**. Hover over the green ball for details, such as connection time, public IP address of originating connection, etc.
- A **table icon** – click it to see the connection log.



Road Warrior Edit Screen

Access via VPN Address	via real LAN Address
<input checked="" type="checkbox"/> 10.0.3.0/24 →	192.168.92.0/24 <input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> 10.0.2.0/24 →	192.168.92.0/24 <input type="checkbox"/>

Using the **openvpngui.exe link** (highlighted in green above), you can setup OpenVPN on a Windows PC. OpenVPN Clients for mobile devices are available from the Google Play store or Apple Store. You can download an OpenVPN configuration file via **ccsiroadwarrior01.ovpn links** (highlighted in yellow above) for connecting all supported road warrior devices (PC, Mac, Android, iOS) to the RemoteVPN server. The zip file contains the certificates, private key, and the OpenVPN configuration file. It is recommended to use the self-containing .ovpn file instead of the .zip file.

The OpenVPN protocol section lets the user choose either TCP or UDP protocol to connect to the RemoteVPN. This is just for the connection between the road warrior device and the RemoteVPN server and does NOT impact the traffic that can be carried through the VPN tunnel.

The Network Access Permissions section shows the routers in the current group and allows you to setup access to those routers. You can enable access via the VPN address and also using the LAN address of the routers. NOTE: please ensure that you do not have duplicate routers with the same LAN address if you have allowed access “via real LAN Address”. Also, if the LAN address matches some other network you are connected to, it may not work and only VPN address access may be possible. It is best to use just the “Access via VPN Address” option if possible, to avoid any issues involving multiple sites where you don’t have control over all the network addresses being used. In the example above, this road warrior can access both router01 and router02 via the VPN Address, but only router01 using its LAN Address.

The Grant Group Access option if enabled lets this road warrior access all the routers in the group, even the ones added in the future.

Click **“OK”** after making your changes. This creates new configuration files that you need to download to the road warrior device. Reconnect to the RemoteVPN using this new configuration.

Router Edit Screen

The screenshot shows the 'Router Edit Screen' in the Contemporary Controls RemoteVPN interface. The interface includes a navigation bar with 'Contemporary Controls', 'RemoteVPN', and 'Help'. On the left, there are fields for 'User Name', 'Password', and a 'Logout' button. The main content area is divided into several sections: 'Name' (ccsi-router01), 'Alias Name' (ccsi-router01.cfg), 'Group' (ccsi-test01), and 'Created on' (2013-01-24 08:39:39). Below this is a 'Notes' field. The 'Router' section includes 'Router's local IP' (192.168.92.1), 'LAN Addr' (192.168.92.0/24), and 'Phone Number'. The 'OpenVPN' section has 'Protocol' set to UDP and 'VPN Addr.' set to 10.0.2.0/24. The 'Network Access Permissions' section shows a table with columns for 'Access via VPN Address' and 'via real LAN Address'. The table contains one entry for 'ccsi-router02' with checkboxes for both access methods. The 'DirectRemote' section has a 'URL' field and a checkbox. The 'Options' section includes 'Enable Internet Access' (unchecked) and 'Masquerade' (checked). At the bottom, there is an 'Additional Settings' link and a red-bordered 'OK' button next to a 'Back' link.

A link (highlighted in red above) allows you to download a configuration file to the PC for subsequently uploading to the EIPR-V/EIGR-V router. Any changes made to the options shown on this screen update the configuration file –which should then be uploaded to the router (by way of the PC). This screen lets you setup the LAN IP address of the router. It also shows the connection protocol (changeable) and the VPN address assigned to the router by the RemoteVPN server. This VPN address is not changeable by the user. In the example screen shown above, the router LAN address is 192.168.92.1 and the VPN subnet is 10.0.2.0/24. From a road warrior connected to the RemoteVPN, this router will be accessible by using the VPN address of 10.0.2.1. A device connected to the LAN port — for example, using IP address 192.168.92.5 — will be

accessible by using the VPN address of 10.0.2.5. In other words, the last octet of the LAN IP is mapped to the last octet of the VPN address.

The Network Access Permissions section (highlighted in yellow) shows the other routers in the group. The example screen above (for **ccsi-router01**) shows permissions to **ccsi-router02** (highlighted in purple). If you enable access to ccsi-router02, then any device on the ccsi-router01 LAN can access ccsi-router02 (and any device on its LAN side) through the VPN address of 10.0.3.x. You will also need to go to the **ccsi-router02** Edit screen and enable access to **ccsi-router02**.

Enabling the URL option (highlighted in blue) under **DirectRemote**, creates a link to reach the router using a browser on any device with no need to run the OpenVPN road warrior client on the device.

When using RemoteVPN, all traffic is restricted to the VPN tunnel – so devices on the LAN side of the router cannot access the Internet or other WAN-side addresses. But LAN devices **can access** other WAN-side addresses or the Internet if you check the **Enable Internet Access** option. The **Masquerade** option allows access to a LAN side device irrespective of the Gateway IP Address setting on that device. This is useful to access legacy devices if they don't have the gateway IP option or if the Gateway Address is already being used to access a different subnet.

Click **"OK"** to save your changes.

Please refer to the [RemoteVPN Application Guide](#) for more information on how this service can be utilized for different applications.

Ordering Information

Model	RoHS	Description
EIGR-C3	✓	Skorpion GigE IP Router with Cellular (Verizon) 0 to 60°C
EIGR-V	✓	Skorpion GigE IP Router with Bridge VPN 0 to 60°C
EIPR-V	✓	Skorpion 10/100Mbps IP Router with VPN

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