Viprinet Configuration

Quick-Start-Guide

viprinet®

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1. Preamble

This quick-start-guide will lead you trough the initial installation of your Viprinet system. It results in a basic configured system, which you can use to reach other devices from the hub LAN interface. Please note that this guide won’t explain the details of the Viprinet system, like performance tuning, routing and so on. If you need assistance with any of these topics, please take a look at the complete manual (https://vlm.support/en/downloads.html).

You can use this guide for either configuring a completely new system (hub and node) or to add a new node to an existing hub.

2. Prerequisites

For this guide you will need the following things or information:

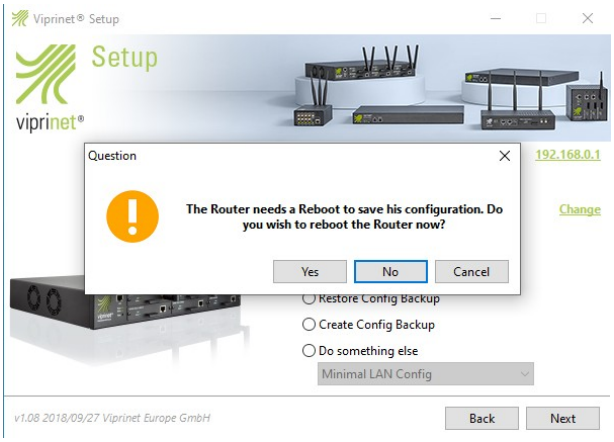
- General:
  - Computer with Windows 7, 8 or 10
  - Viprinet Setup Tool (https://vlm.support/en/downloads.html)
- Node:
  - If you have a modular router: modules
  - Credentials from your ISP
  - If you have wireless (LTE) modules: SIM cards and pins (and APN, if this is special for your region or needs a custom APN)
  - A private IP range you want to use on the router (e.g. 192.168.0.0/24)
  - A private IP from this subnet for your router (e.g. 192.168.0.1)
- Hub:
  - A public IP for the WAN interface
  - Preferably another public IP for the LAN interface, if this isn't possible you can also use a private IP here. You'll need to access the hub's webinterface via this IP later on.

IMPORTANT: If a checkbox or setting isn't mentioned in this guide, please leave the default setting as you continue. If you want to know what these settings do, or change them, please look at the manual for an in-depth explanation.

3. Node configuration

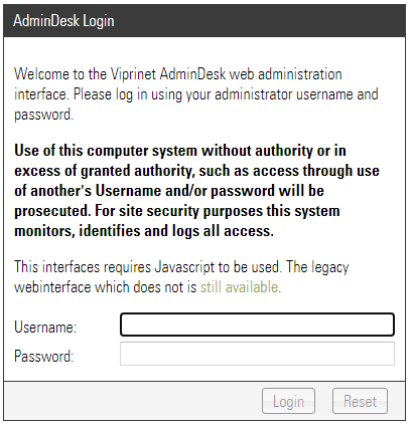
1. Download the Viprinet setup tool.
2. Assign an IP from the private node sub net to your computer (e.g. 192.168.0.2/24).
3. Plug in the modules and connect the LAN port of the node to the ethernet port of your computer.
4. Start the Viprinet setup tool and click ‘next.’ Make sure to apply to all firewall popups.
5. Wait until your device shows up, select it and click next.
6. Fill out the required fields (router name, IP, netmask, password), click next, enter a host name of your choice.

7. Wait until the setup tool finishes “Setting router IP” and “Enabling Services”, then close the setup tool when you reach the “What would you like to do?” step. Confirm the reboot question with “Yes.”

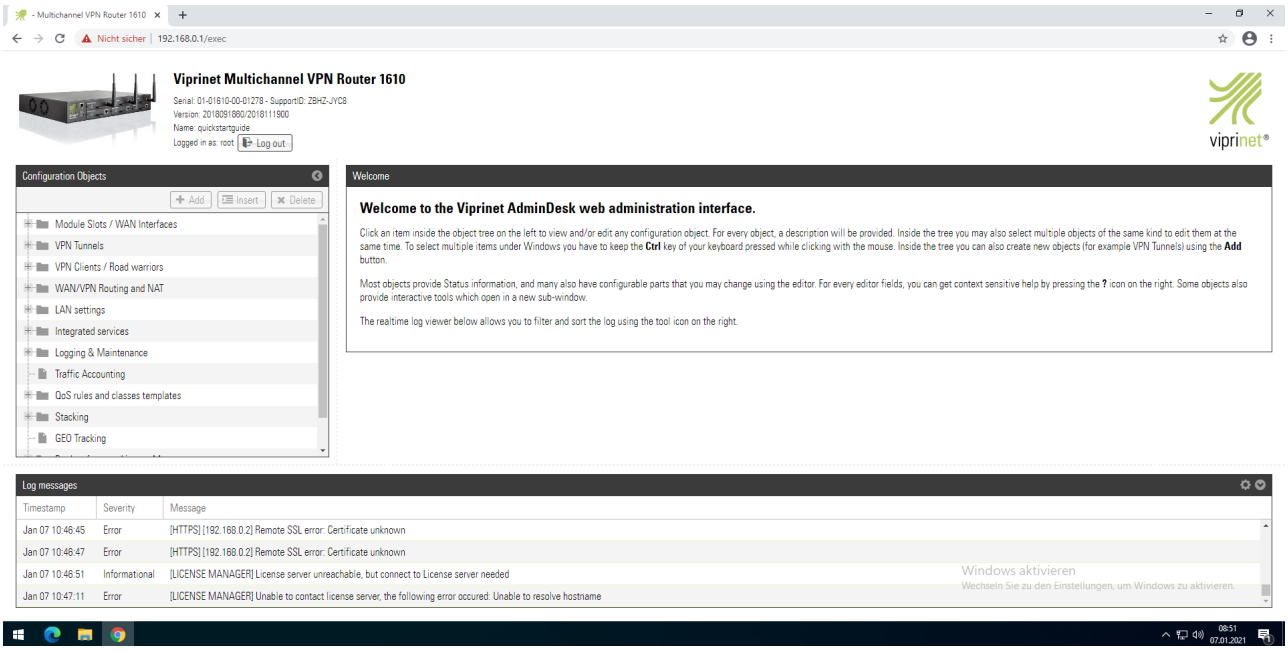


8. The router now generates a SSL certificate for the VPN connections and web interface. Wait a few seconds. Then try to reach the router by entering its new IP in your web browser.

9. You can now choose if you want to access the web interface via http or https. Be aware that you need to accept the self-signed-cert when you choose https. Log in with username “root” and the password you set previously.



10. Now you are logged in and should see the contents of the web interface:



The top part of the interface is static, it shows basic information like router name, serial number and support ID.

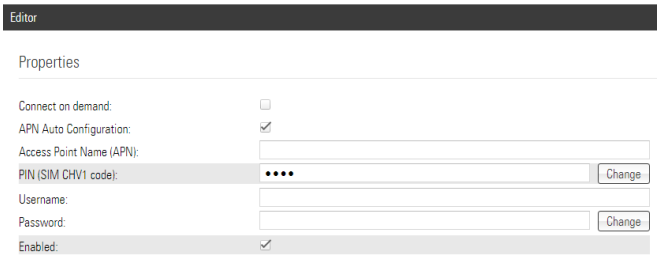
The left box is the navigation. Entries with a “+” are expandable.

On the bottom you can see the router log, which contains useful information about current activities.

The box in the middle (where you can see “Welcome to the…” in this screenshot) is the main content, it changes with every different navigation topic.

11. We want to configure our modules or WAN interfaces now, so expand “Module Slots, WAN Interfaces” in the navigation. Select the module you want to start with, in this case a 4G module. You can see the main content is changing to display the module settings. For this module I only need to set the PIN, so we need to click on the “Change” button in the PIN line and enter the SIM card pin twice.

    We need to manually activate every module, so we set the checkbox labeled with “Enabled.”



    After that, scroll down and activate this setting with “Apply”. You will now see some log entries showing you that the module has started. Scroll up again and refresh the “Status” box. When the status switches from “Connecting” to “Up” the module has been connected successfully.

    Repeat this step for all of your modules.

12. Now we want to add a tunnel, the connection between node and hub. We’re using the following scheme here, where → stands for “contains”:

    Tunnel → Channel → Module

    So we need to add the tunnel first. To do this, click on the navigation entry “VPN Tunnels” and click on the “Add” button on top of the navigation. Enter a tunnel name you want and click “Ok”. You will now see the new tunnel appearing as a new sub-entry in the navigation. Click on this tunnel. Now we need to set some parameters:

    Connection password: A unique password that needs to be identical on node and hub
    Enabled: check
    Push routes trough tunnel: check
    IP for this tunnel to connect to: Enter the public WAN IP of your VPN hub here

    Click on “Apply” when you’re done.

13. Expand the tunnel entry in the navigation and select “Tunnel channels”. Add one tunnel channel for each module you have by clicking on the “Add” button on top of the navigation. Afterwards, expand the “Tunnel channels” entry and select the first channel.
14. Enter the following settings:

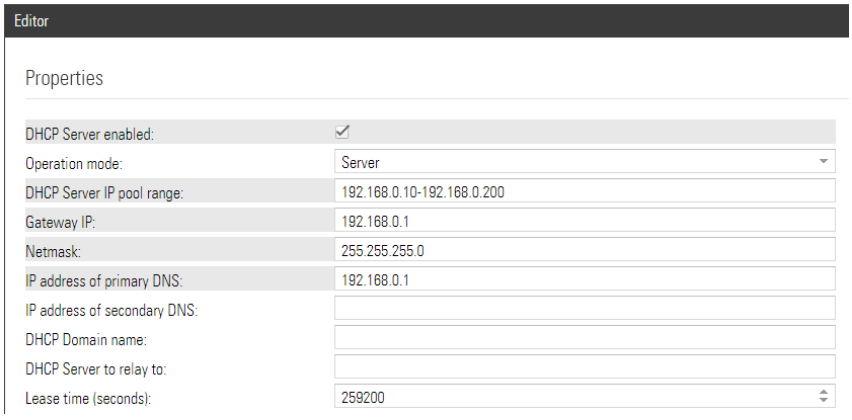
    Module slot / WAN Interface to use: the interface you want to use in this channel
    Enabled: check

    Click on “Apply” when you’re done. Do this step for every channel you have.
15. Expand “WAN/VPN Routing and NAT”, click on “WAN/VPN routing rules”. Select the created tunnel as your “Default routing Interface” and click on apply.
16. Click on LAN settings in the navigation and set the checkbox for “Use for dynamic routing”. Click on “Apply LAN settings and restart LAN interface”.
17. If you want to enable the DHCP Server:

    Expand the navigation entry “LAN settings”, click on “DHCP server settings”. Enter the following settings:

    DHCP Sever enabled: check
    DHCP Server IP pool range: eg. 192.168.0.10-192.168.0.200
    Gateway IP: the IP of your Viprinet router, in my case 192.168.0.1
    Netmask: your netmask, in my case 255.255.255.0
    IP address of primary DNS: in most cases also the IP of your router

    Click on “Apply settings (and restart service)”



18. Expand the “Integrated services” navigation entry and click on “DNS Service settings”. Switch “DNS server operation type” to “Caching proxy” and enter the LAN IP of your hub. Check the “Enabled” box. Click on “Apply settings (and restart service).”

The basic node configuration is done.

4. Hub configuration

Please note: If you only want to add a new tunnel to an existing hub start with step 4.

Connect to your hub LAN port and do the first 8 steps from the node quickstart guide (3). Make sure to use your hub sub nets instead of the node ones.

1. Browse to the hub web interface and log in.
2. Go to “LAN settings” and enter your “Default Gateway IP”.
3. Go to “WAN settings” and insert address, net mask and default gateway. This IP is the “IP to connect to” from point 3.12 in this guide. This IP must be a public one.

   You should now see a log message like “[VPN-Init] Incoming connection…” This is your previously configured node trying to connect to this IP.
4. Select “VPN Tunnels” in the navigation and click the “Add” button at the top of the navigation. Enter a tunnel name. This name needs to be identical to the one you configured on the node. After this, expand “VPN Tunnels” and click on the created tunnel. You need to change the following settings:

   Connection password: The same tunnel password you configured on the node
   Enabled: check
   Accept incoming routes: check
   Create channels automatically: check

   After this, click on “Apply”. Wait a few seconds, then scroll up again and click on “Refresh” in the properties box. You should see the tunnel as “Connected: Yes” now.
5. Expand “WAN/VPN Routing and NAT” in the navigation and select on “Masquerading (Outbound NAT) Entries.” Click the “Add” button on top of the navigation. Insert a name for this new masquerading rule, in my case, I keep it the same as the tunnel name, so I can recognize it. Now you need to set the following settings:

   Network: Your previously specified node network, in my case 192.168.0.0/24
   IP to mask with: Your hubs LAN IP

   Click on “Apply” afterwards.

The basic hub configuration is done. You should now be able to reach the internet from a device behind the node.

5. Register your devices in the VLM Portal

VLM is “Viprinet Lifetime Maintenance”, the service and support subscription for your Viprinet device. With this you get access to firmware update, replacement devices and so on. You can find more information on https://vlm.support/en/service_levels.html

1. Go to the VLM portal https://license.vlm.support/index.php?lang=uk and login or register.
2. Click on “Register Router” and insert the serial number and support ID as shown in the example. (You can find the numbers in the top of the routers web interface)
3. Select a location of the router or add a new one.
4. Click on “register”
5. Select the partner from whom you purchased the router. If you purchased the devices directly from VLM Support GmbH, or your partner is not listed, select “No Partner”.