

Industrial Cellular VPN Router

Application Note 052

PPTP Server with Window OS

Version: V1.0.0
Date: Mar 2020
Status: Confidential

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1. Introduction

1.1 Overview

This document contains information regarding the configuration and use of PPTP server with Windows OS.

This guide has been written for use by technically competent personnel with a good understanding of the communications technologies used in the product, and of the requirements for their specific application.

1.2 Compatibility

This application note applies to:

Models Shown: ELMATIC SPARROW NW10 series.

Firmware Version: V1.1.2(3be6e5a) or newer

Other Compatible Models: None

1.3 Version

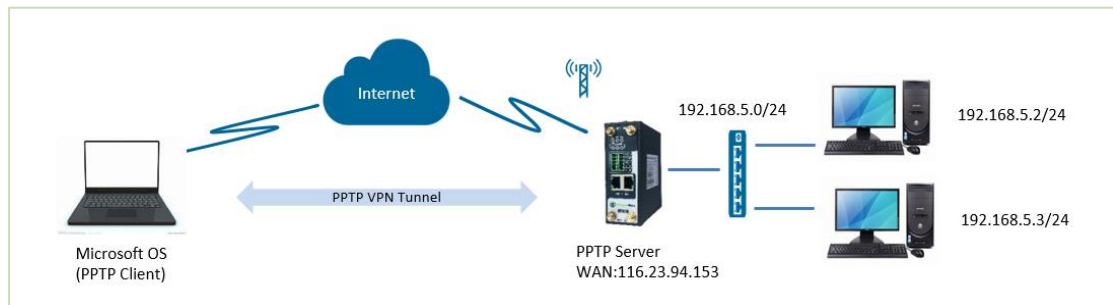
Updates between document versions are cumulative. Therefore, the latest document will include all the content of previous versions.

Release Date	Doc. Version	Firmware Version	Change Description
2020/03/17	V1.0.0	V1.1.2(3be6e5a)	First released

1.4 Corrections

Appreciate for corrections or rectifications to this application note, and if any request for new application notes please email to: elmark@elmark.com.pl

2. Topology



1. ELMATIC SPARROW NW10 Router run as PPTP server with the static public IP address.
2. A PC run with Microsoft Windows OS works as PPTP client.
3. PPTP VPN tunnel is established between ELMATIC SPARROW NW10 router and the PC, PC can access to the LAN device behind ELMATIC SPARROW NW10 Router.

3. Configuration

a) PPTP Server Configuration

1. Go to **Link Management>Ethernet>LAN**, specify the LAN IP address as 192.168.5.0/24, like below:

The screenshot shows the 'LAN Settings' configuration window. The 'General Settings' section includes: Index (1), Interface (LAN0), IP Address (192.168.5.1), Netmask (255.255.255.0), and MTU (1500). The 'DHCP Settings' section includes: Enable (checked), Mode (Server), IP Pool Start (192.168.5.2), IP Pool End (192.168.5.200), Netmask (255.255.255.0), Lease Time (120), Gateway, Primary DNS, Secondary DNS, and WINS Server. There are 'Save' and 'Close' buttons at the bottom right of the window.

2. Click Save>Apply.

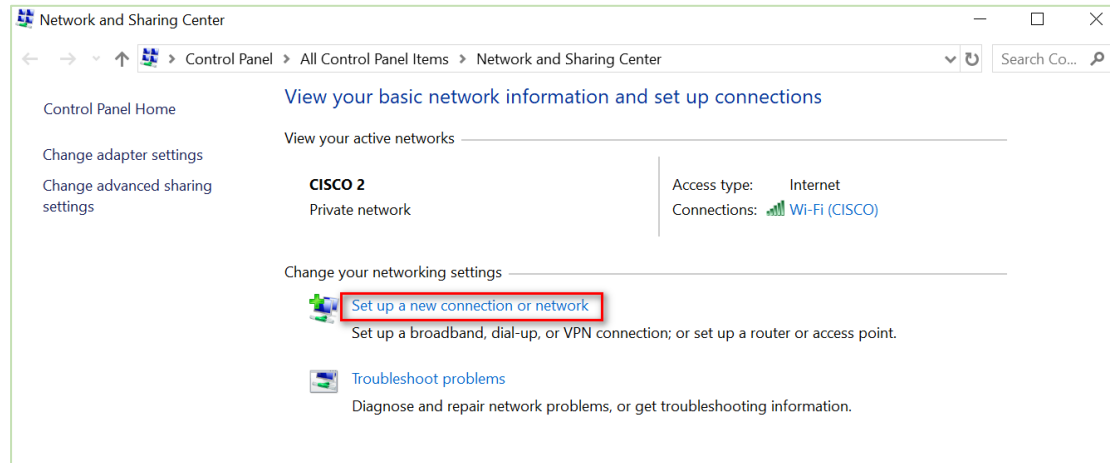
3. Go to **VPN>PPTP>PPTP Server**, enable PPTP server and configuration like below:

The screenshot shows the 'PPTP Server' configuration window. The 'PPTP Settings' section includes: Enable (checked), Local IP (192.168.168.1), Start IP (192.168.168.2), End IP (192.168.168.200), and Enable Debug (checked). The 'PPP Settings' section includes: Authentication (CHAP), Username (nwttest), Password (nwttest), MTU (1500), and Enable Debug (checked). The 'Advanced Settings' section includes: Binding Interface and Enable NAT (checked). There are 'Save' and 'Apply' buttons at the bottom right of the window.

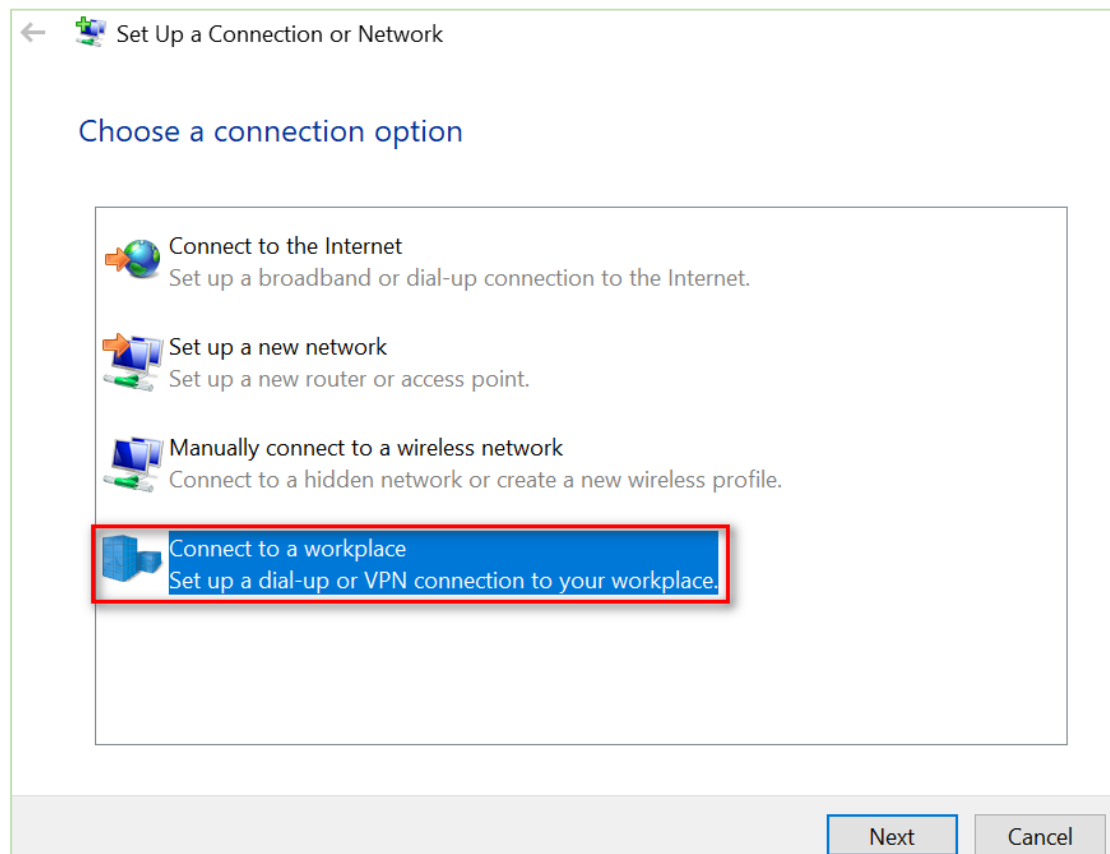
4. Click Save>Apply.

b) PPTP Client Configuration

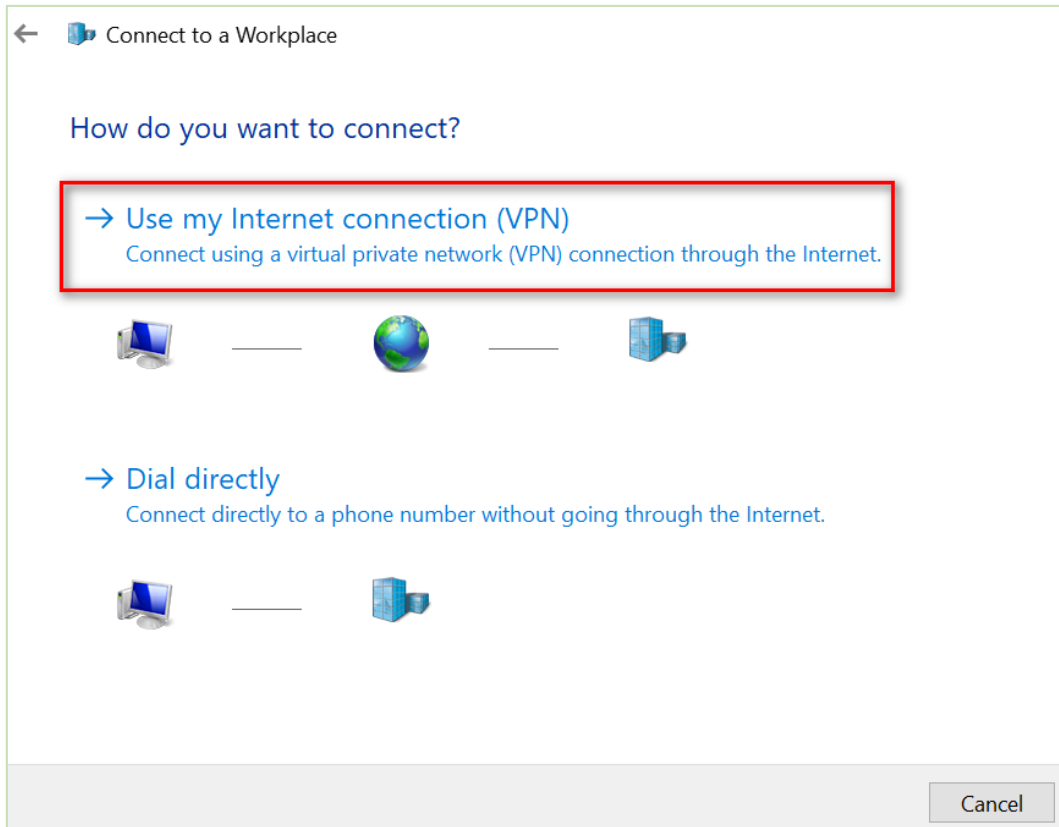
1. Open the PC and go to “Network and Sharing Center”, click “Set up a new connection or network”:



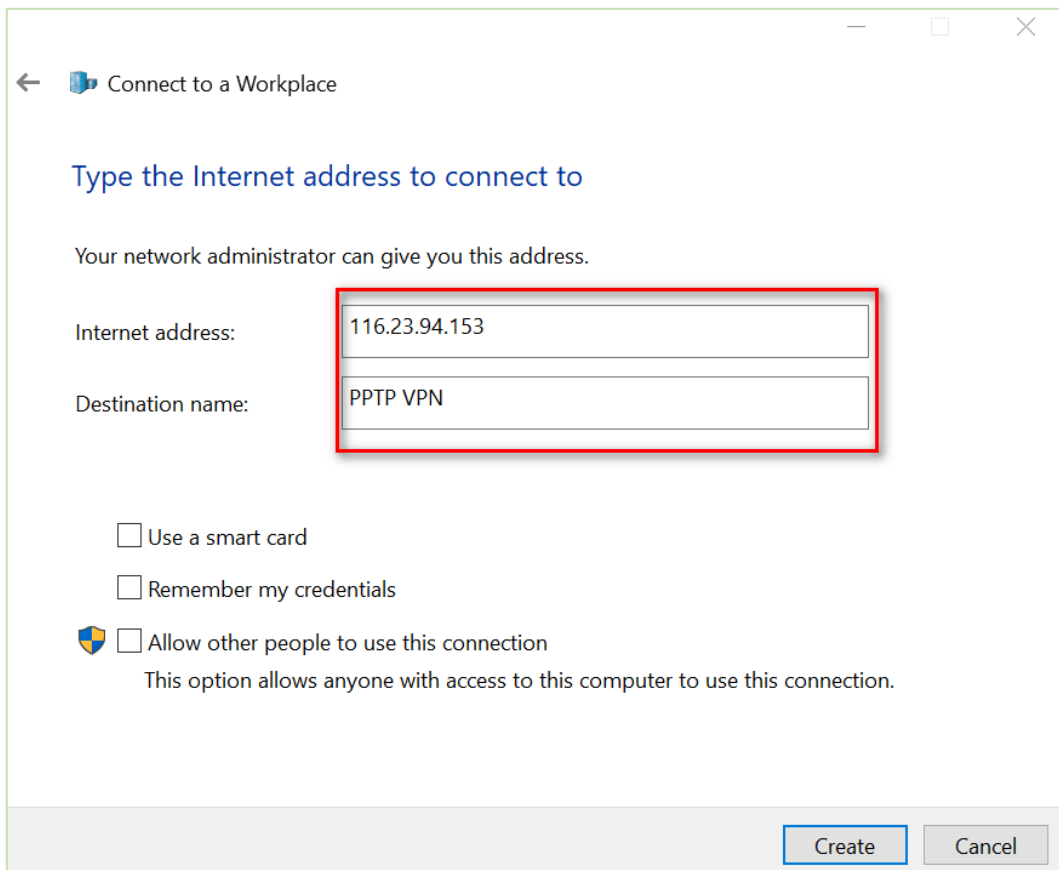
2. Choose “Connect to a workplace” and click “Next”:



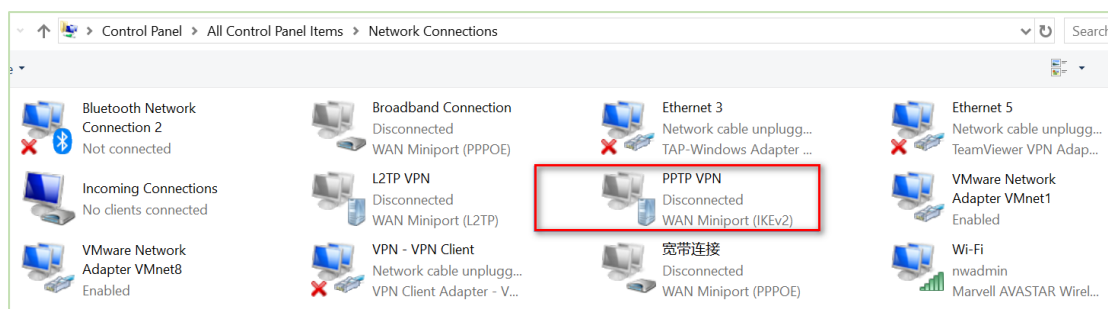
3. Click “Use my Internet connection (VPN)”.



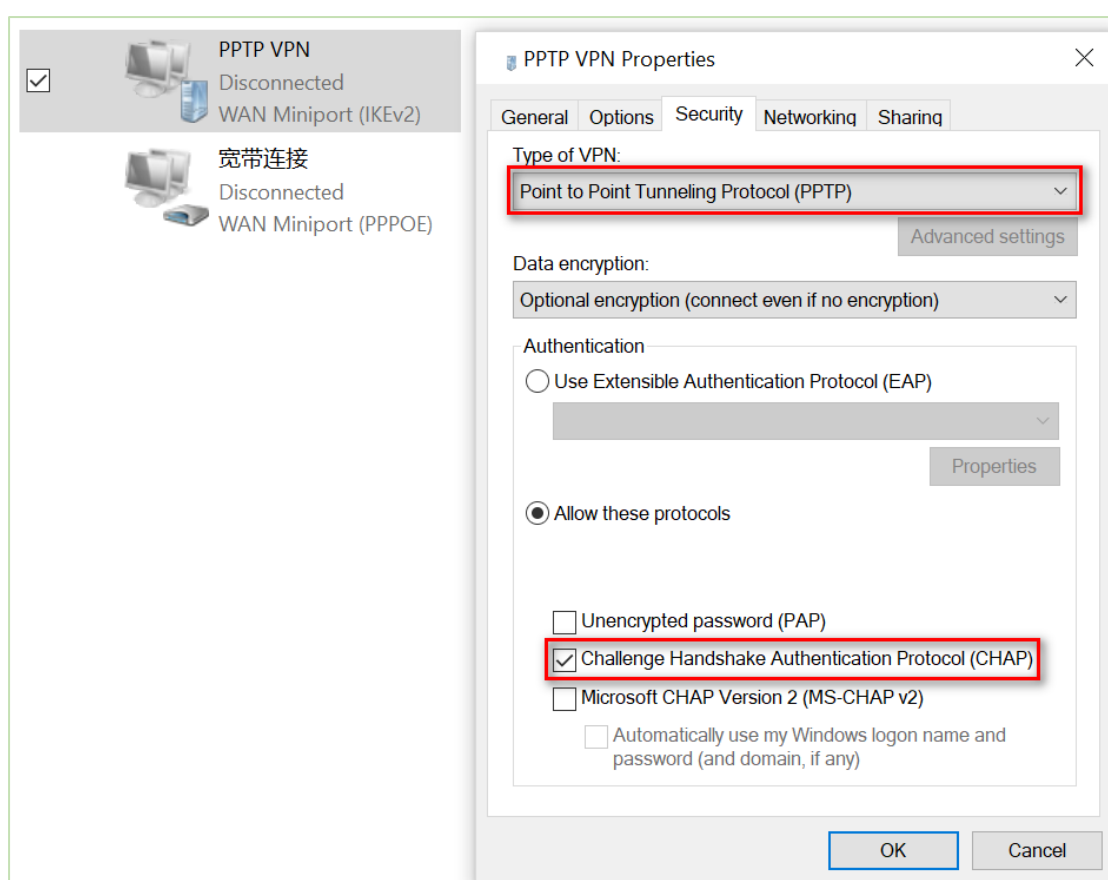
4. Enter the PPTP Server IP address and Destination name, click "Create".



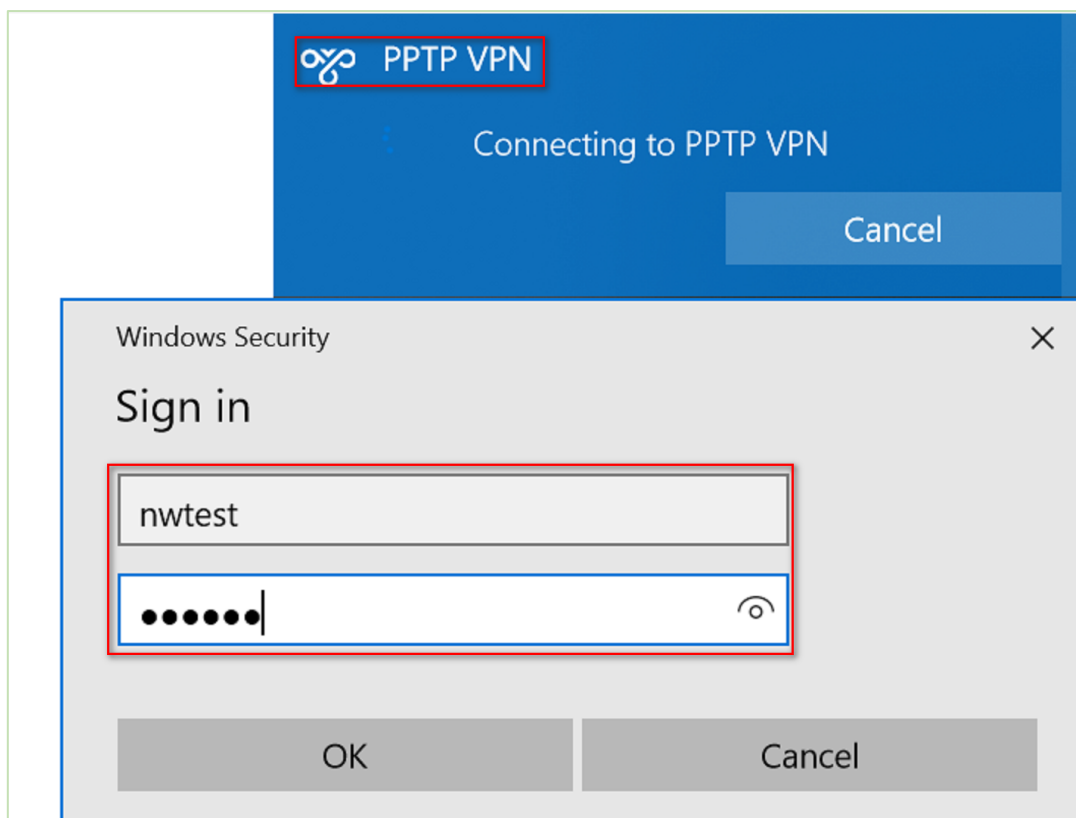
5. After that, we had created PPTP connection, like below:



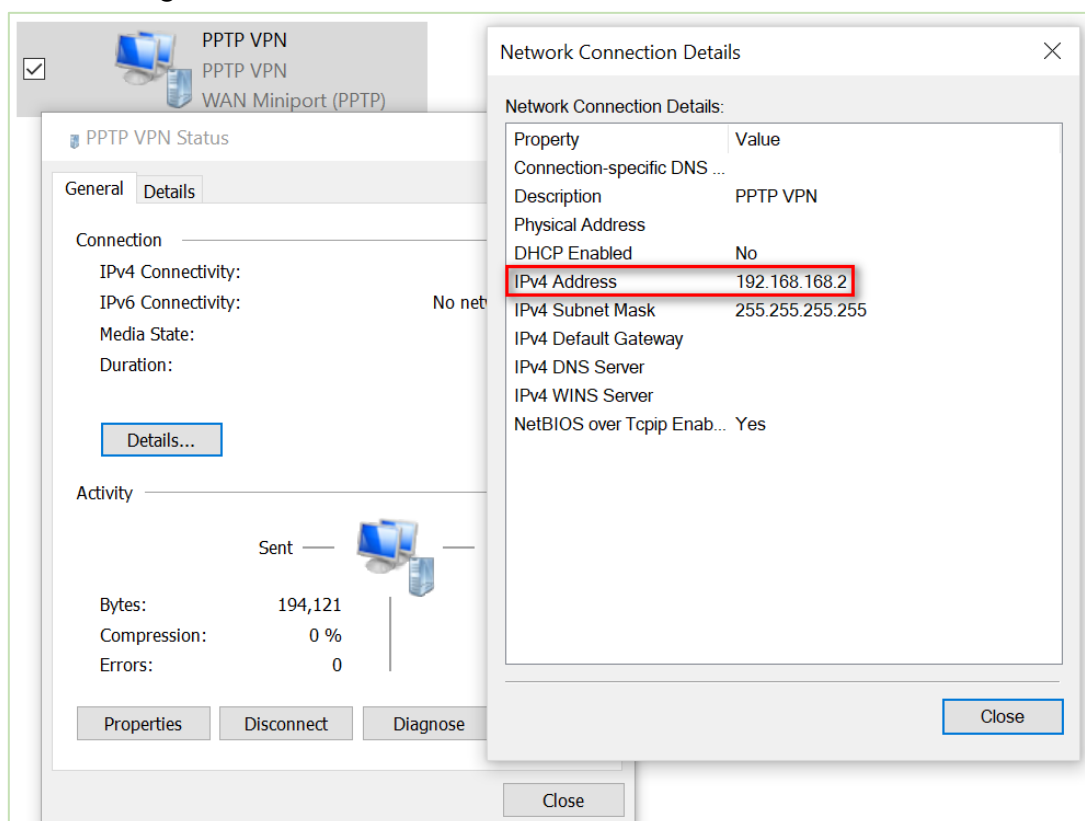
6. Right Click "PPTP VPN", and choose "Properties", go to "Security" and specify the Type of VPN and Authentication, like below:



7. After finishing all above settings, click to connect "PPTP VPN", and sign in with the Username and Password, Click "OK", like below:



8. PPTP Client had connected to PPTP Server successfully. Right Click the "PPTP VPN", choose "Status", go to "Details", then we can see that the PPTP Server had assigned the IP address to the PPTP Client.



4. Testing

1. Go to **VPN>PPTP>Status**, the PPTP Client had connected to PPTP Server successfully:

Overview	Status	PPTP Server	PPTP Client
Link Management	PPTP Server Status		
Industrial Interface	Index	Status	Remote IP
Network	1	Connected	192.168.168.3
Applications			Interface
VPN			ppp1
OpenVPN			Uptime
IPSec			00:08:49
GRE	PPTP Client Status		
DMVPN	Index	Description	Status
L2TP			Local IP
PPTP			Remote IP
			Interface
			Uptime

2. Ping from PPTP Client to PPTP Server and successfully.

```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.17134.556]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Users\Administrator>ping 192.168.5.1

Pinging 192.168.5.1 with 32 bytes of data:
Reply from 192.168.5.1: bytes=32 time=13ms TTL=64
Reply from 192.168.5.1: bytes=32 time=1ms TTL=64
Reply from 192.168.5.1: bytes=32 time=1ms TTL=64
Reply from 192.168.5.1: bytes=32 time=4ms TTL=64

Ping statistics for 192.168.5.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 13ms, Average = 4ms

C:\Users\Administrator>
```