# Bosch Installer Services

## Bosch Cellular Service

BOSCH

**en** Reference Guide

# Table of contents

# 1 Introduction

This guide includes instructions for using Bosch Cellular Service for reporting to central station, for personal notifications, for Remote Programming Software (RPS) connections, and for Remote Security Control (RSC) connections.

## 1.1 About documentation

# 2 Requirements

You need the following for communications using Bosch Cellular Service:

☐ **A cellular communicator and compatible control panel**

Cellular communicators include:

– B440, B440-C Conettix Plug-in Cellular Communicators
– B441, B441-C Conettix Plug-in Cellular Communicators
– B442 Conettix Plug-in Cellular Communicator
– B443 Conettix Plug-in Cellular Communicator

Compatible control panels include:

– B9512G, B8512G
– B6512, B5512, B4512, B3512
– D9412GV4, D7412GV4, D7212GV4
– D9412GV3, D7412GV3, D7212GV3
– FPD-7024

☐ **Bosch Cellular Service account and login credentials**

Before you can utilize cellular communication for reporting, personal notifications, RPS connections, or RSC connections you need to register for Bosch Cellular Service at the Bosch Installer Services Portal, https://installerservices.boschsecurity.com/.

☐ **RPS v6.03 or higher**

RPS is available for download at the B Series Installer's Site (http://www2.boschsecurity.us/bseriesinstall/before-you-install?s=software-download&c=remote-programming-software-rps) RPS is also available for download on the RPS product page. Browse to us.boschsecurity.com.

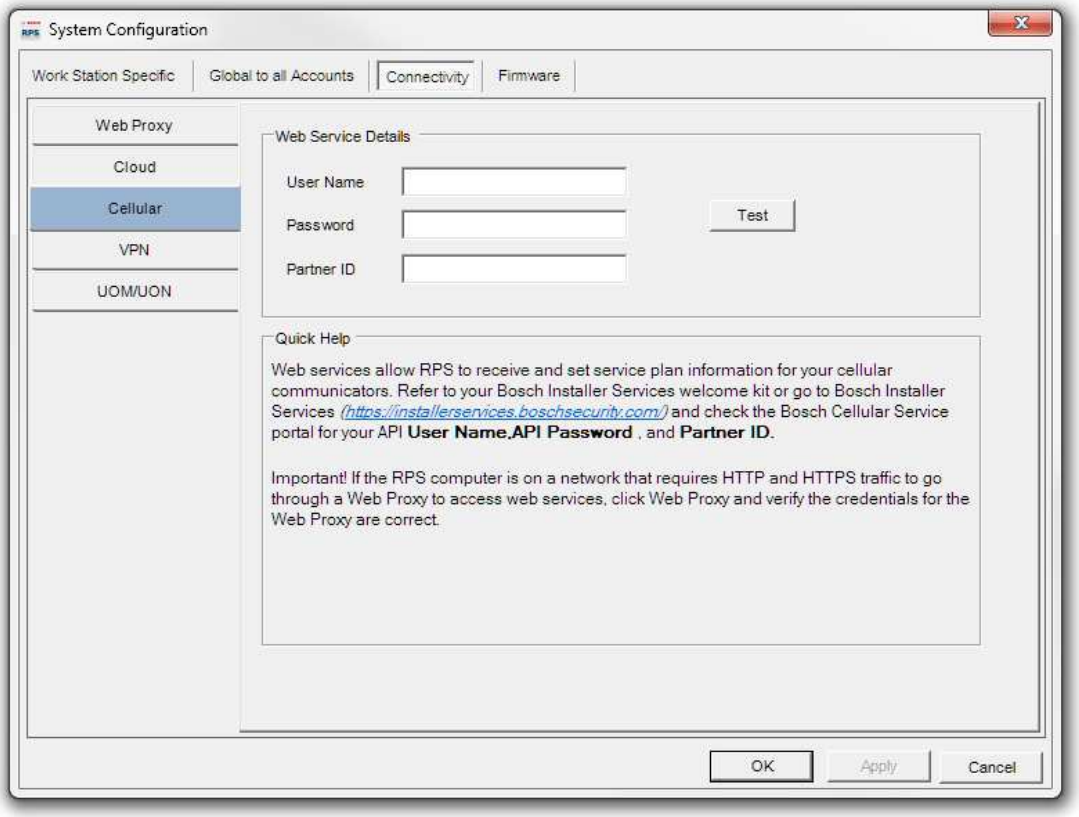
☐ **Internet access for the RPS workstation**

The RPS workstation (computer) must have access to the internet.

# 3 Web services, RPS setup

Once you have a Bosch Cellular Service account and install RPS, you need to enter web services information in RPS.
Web services allow RPS to receive and set service plan information for your cellular communicators. Refer to your Bosch Installer Services welcome kit or go to Bosch Installer Services (https://installerservices.boschsecurity.com/) and check the Bosch Cellular Service portal for your API user name and password, and your company's Partner ID.

**Notice!**
**If the RPS computer accesses web services via Web Proxy, verify proxy credentials**
If the RPS computer is on a network that requires HTTP and HTTPS traffic to go through a Web Proxy to access web services, click Web Proxy and verify the credentials for the Web Proxy are correct.




**Setting up web services in RPS**

1. In the menu bar, click Config to open the configuration menu.
2. Click System.
3. Click the Connectivity tab, and then click Cellular. The window shows the web services information.
4. In the Web Service Details window, enter your API user name and password, and your company's Partner ID. Refer to your Bosch Installer Services welcome kit, or go to the Bosch Cellular Service portal.
5. Click Test to verify the connection to the web services.
6. Click OK to save the changes and close the window.

# 4 Cellular communicator, order and configure

This section includes cellular communicator ordering information and information to help you configure the control panel account for cellular service.

## 4.1 Cellular communicator ordering information

You can order the following plug-in cellular communicators, SIM cards, and cellular kits from Bosch:

| Model | Notes | Operator (carrier) |
|---|---|---|
| B440<br>Conettix Plug-in Cellular Communicator | Pre-activated,<br>CDMA device | Verizon 3G |
| B440-C<br>Conettix Plug-in Cellular Communicator | Cold (not activated),<br>CDMA device | Verizon 3G |
| B441<br>Conettix Plug-in Cellular Communicator | Pre-activated,<br>CDMA device | Verizon |
| B441-C<br>Conettix Plug-in Cellular Communicator | Cold (not activated),<br>CDMA device | Verizon |
| B442<br>Conettix Plug-in Cellular Communicator | GPRS for Latin America,<br>SIM card required | - |
| B443-ATT<br>Conettix Plug-in Cellular Communicator<br>ITS-SIM-ATT AT&T SIM card | HSPA+<br>Cold (not activated) | AT&T 3G/LTE, US |
| B443-TMO<br>Conettix Plug-in Cellular Communicator<br>ITS-SIM-TMO T-Mobile SIM card | HSPA+<br>Cold (not activated) | T-Mobile, US |
| B443-ROG<br>Conettix Plug-in Cellular Communicator<br>ITS-SIM-ROG Rogers SIM card | HSPA+ for Canada<br>Cold (not activated) | Rogers Wyless, CA |

## 4.2 Configure control panel account for cellular service

First, create a panel account in RPS for the control panel with the cellular communicator.
For the B440, B440-C, B441, and B441-C cellular communicators, leave the cellular parameters in the panel account at their defaults. Skip to the next section, *Cellular communicator, assign price plan and activate, page 9*.
For the B442 or B443 cellular communicator, enter the cellular network's Access Point Name (APN) in the panel account.
To open the RPS control panel account in Panel view and enter the network Access Point Name (APN), follow the steps below.

1. In the Panel List, right-click the panel account you want to configure, then click Open Panel View.
2. Click PANEL WIDE PARAMETERS > CELLULAR PLUG-IN MODULE.
3. The SIM card you ordered determines the APN to use. Refer to table below. Double-click Network Access Point Name (APN). Enter the APN and click OK.

| SIM card | APN |
|---|---|
| ITS-SIM-ATT AT&T SIM card | wyless.com.attz |
| ITS-SIM-TMO T-Mobile SIM card | gne |
| ITS-SIM-ROG Rogers SIM card | wyless.apn (RPS default) |

4. Leave the other parameters in CELLULAR PLUG-IN MODULE (including the Network Access Point User Name, Network Access Point Password, and SIM PIN) at their defaults.
5. Click Save.

# 5 Cellular communicator, assign price plan and activate

You can assign a price plan and activate cellular communicators (or SIM cards) from RPS, or from the Bosch Cellular Services portal.
Before you activate, you must complete section 3, *Web services, RPS setup, page 6*, and section 4, *Cellular communicator, order and configure, page 7*. In section 4 you create a panel account in RPS for the control panel with the cellular communicator.

## 5.1 Pre-activated communicators

Pre-activated plug-in communicators (B440 and B441) arrive ready to communicate using the default price plan you chose in your Bosch Cellular Service agreement. You receive an email with an IP address and phone number for each communicator when your order is complete. You can also view the communicator's IP address and phone number in the Bosch Cellular Service portal or using RPS.
Billing for pre-activated communicators begins 150 days from the shipping date or upon the first data connection, whichever comes first.

## 5.2 SIM cards not pre-activated

SIM cards are not pre-activated. You can purchase SIM cards to hold in your stock without accumulating data charges.
For the ITS-SIM-ATT AT&T SIM card and the ITS-SIM-TMO T-Mobile SIM card, billing begins 60 days after activation or upon the first data connection, whichever comes first.
For the ITS-SIM-ROG Rogers SIM card, billing begins 30 days after activation or upon the first data connection, whichever comes first.

## 5.3 Activate using RPS

To assign a price plan and activate a cellular communicator from RPS:
1. In the Panel List, right-click on the panel account. Click Open Panel Data - View.
2. In the Panel Data - View, click the Cellular tab.

Use this tab to configure Cellular Connectivity for control panels that support B44x Conettix Plug-in Cellular Communicators, the B450 Conettix Plug-in Communicator Interface, or control panels that support the ITS-DX4020-G GPRS/GSM Communicator.
– B9512G, B8512G
– B5512, B4512, B3512
– D9412GV4, D7412GV4
– D9412GV3, D7412GV3, D7212GV3
– FPD-7024 version 2.10 or higher

Cellular Connectivity fields are preset in D9412GV4 and D7412GV4 v2.xx control panel accounts. To set SIM plans on other compatible control panels, create a place-holder B9512G, B8512G, or B Series panel account.

**Select Cellular Communicator (B9512G, B8512G control panels only)**
The Select Cellular Communicator drop-down list only appears for B9512G and B8512G control panels.

| Selection | Description |
|---|---|
| Cellular | Select Cellular to configure the cellular communicator for reporting, RPS, RSC, automation, and Cloud connections. |
| Cellular Secondary | Select Cellular Secondary to configure the cellular communicator for reporting connections only. |

**Notice!**
**Cellular Secondary only supports reporting.**
The Cellular Secondary selection only supports reporting to the central station. It does not support RPS, RSC, automation, or Cloud connections.

**Cellular Connectivity**

| Field / button name | Description |
|---|---|
| Description | Enter a description for the cellular communicator module (up to 40 characters). |
| MEID(ESN) or SIM# | Enter the serial number (MEID) or SIM number (ICCID) of the cellular communicator module.<br>– MEID is a 14-digit electronic serial number printed on the B44# radio chip and box label.<br>– SIM card numbers are 19 or 20-digit numbers printed on the SIM card. |
| Cell Number | Enter the cell number RPS uses when it connects to the control panel using the Cellular Callback mode. (Enter the number manually or retrieve it by clicking the **Query** button.) |
| IP Address | Enter the IP address RPS uses when it connects to the control panel using the Cellular mode. (Enter the address manually or retrieve it by clicking the **Query** button.) |
| Port | Enter the Port number RPS uses when RPS connects to the control panel using Cellular. |
| Use VPN checkbox | Check this box to connect to a PPTP VPN prior to connecting to the control panel. (Uncheck if you have a permanent VPN connection or an IPSec tunnel configured that allows you to access the IP address.) PPTP VPN setup must be done in Windows and in RPS (Config/ System/Connectivity/VPN).<br>If you have a VPN running outside of RPS and check Use VPN, RPS might attempt to disconnect the external VPN after connecting to a control panel. |
| Query button | Click Query to activate the communicator (or SIM card). RPS shows the cell number and IP address associated with the communicator (or SIM card) at the end of the activation process. You must have Web Services configured in RPS, Config/System/Connectivity/ Cellular tab, and a valid MEID or SIM number entered.<br>If the communicator (or SIM card) is already active, RPS retrieves the Cell Number and IP Address. |

**Data Plan**

**Notice!**
**Data Plan fields are locked**
Use the Edit button to unlock the Data Plan fields and make changes.

| Field / button name | Description |
|---|---|
| Name | Name of the plan. Click the Plan Help button to see a description of each of the data (price) plans. |
| Incl. Data (KB) | Included amount of data that the control panel can send per month (in KB) per this data plan. Overage fees accrue for data used in excess of the plan limit. |
| Incl. Notifications | Maximum number of SMS's that the control panel can send per month per this data plan. Overage fees accrue for SMSs sent in excess of the plan limit. |
| Poll Rate (Recommended) | The Poll Rate sets the interval in seconds that the panel sends a heartbeat poll to the central station receiver for supervision.<br>This Poll Rate (Recommended) field shows the recommended poll rate to optimize the Data Plan. Poll Rate can not be edited in this field.<br>Poll Rate can only be edited in the RPS Panel View, PANEL WIDE PARAMETERS > Enhanced Communication > Poll Rate parameter.<br>The Poll Rate parameter is linked to the PANEL WIDE PARAMETERS > Enhanced Communication > Receiver Supervision Time parameter.<br>Setting the Receiver Supervision Time parameter automatically sets the Poll Rate, ACK Wait Time, and Retry Count parameters. Refer to RPS help for guidance in setting these parameters to optimize the Data Plan. |
| ACK Wait Time (Recommended) | Time that the control panel waits for an ACK (acknowledgement) from the central station after a heartbeat (poll) or other report has been sent.<br>This ACK Wait Time (Recommended) field shows the recommended ACK Wait Time to optimize the Data Plan. ACK Wait Time can not be edited in this field.<br>ACK Wait Time can only be edited in the RPS Panel View, PANEL WIDE PARAMETERS > Enhanced Communication > ACK Wait Time parameter.<br>The ACK Wait Time parameter is linked to the PANEL WIDE PARAMETERS > Enhanced Communication > Receiver Supervision Time parameter.<br>Setting the Receiver Supervision Time parameter automatically sets the ACK Wait Time, ACK Wait Time, and Retry Count parameters. Refer to RPS help for guidance in setting these parameters to optimize the Data Plan. |

| | |
|---|---|
| Retry Count (Recommended) | Number of times the control panel resends the event before declaring a Path Failure.<br>This Retry Count (Recommended) field shows the recommended Retry Count to optimize the Data Plan. Retry Count can not be edited in this field.<br>Retry Count can only be edited in the RPS Panel View, PANEL WIDE PARAMETERS > Enhanced Communication > Retry Count parameter. The Retry Count parameter is linked to the PANEL WIDE PARAMETERS > Enhanced Communication > Receiver Supervision Time parameter.<br>Setting the Receiver Supervision Time parameter automatically sets the Retry Count, ACK Wait Time, and Retry Count parameters. Refer to RPS help for guidance in setting these parameters to optimize the Data Plan. |
| Show Plans button | Click this button to make a web services query and populate the Data Plan List dialog box with all the possible data plans available to this account. (You must have Web Services configured in Config/System Cellular Tab and a valid MEID or SIM number entered.) |
| Plan Help button | Click this button display online help on how to choose a data plan based on control panel settings. |
| Set Plan button | After selecting a plan in the Data Plan list box, click this button to set it. |
| Edit button | Click to allow editing of the fields. |
| OK | Click to accept any changes and close the window. |
| Cancel | Click to cancel to discard any changes and close the window. |

**Suspending a data plan**

To suspend or unsuspend (resume) a plan for an active device:

1. Enter the MEID(ESN) or SIM# in the appropriate field.
2. Click the Query button.
3. If the active device is found, then right-click on the highlighted row in the Data Plan table. Click suspend or unsuspend.

To verify the data plan was suspended (or unsuspended), click the Query button several minutes after suspending or unsuspending. Suspending or unsuspending the data plan for a device can take up to 10 minutes.

## 5.4 Activate using Bosch Cellular Service portal

To assign (or change) a price plan and activate a cellular communicator or SIM card, follow the steps below to place an order to activate in the Bosch Cellular Service portal.

1. Log into the Bosch Cellular Service portal, https://www.boschcellular.com.
2. Click the Quick Links tab, then click Place order.
3. For SIM cards (required for B442 and B443 communicators), click Activate existing SIM cards.
   Go to *Activation settings and connections to activate, SIM cards, page 13*.
   For B440 and B441 communicators, click Activate existing CDMA devices.
   Go to *Activation settings and connections to activate, CDMA devices, page 14*.

### 5.4.1 Activation settings and connections to activate, SIM cards

Use the steps in each section below to configure the activation settings and choose the connections (SIM cards) to activate.

**Operator (carrier)**

To choose the operator (carrier) for SIM cards:

1. Double-click Operator to open the drop-down list.
2. In the list, click the operator (carrier) for the cards you are activating. To determine the correct operator, refer to *Cellular communicator ordering information, page 7*.

**Cold price plan**

Once you choose the operator (carrier), your company's default price shows in the Cold price plan field.

1. Double-click Cold price plan to open the drop-down list.
2. Click your company's default price plan.

**Price plan**

Each price plan includes three levels of service: Backup Shared plan, Standard Share plan, and Commercial Share plan.

1. Double-click Price plan to open the drop-down list.
2. Click the appropriate plan for the cards you are activating. To learn more about price plans, refer to *Bosch Cellular Service price plans, page 41*.

**Subject**

Subject is an optional free form text field. For example, you could use it record a job name or PO number.

**Field 1 value**

Field 1 is an optional free form text field. Bosch recommends using Field 1 for the area 1 account number (RPS Panel View, Area Wide Parameters > Account Number).

**Field 2 value**

Field 2 is an optional free form text field. Bosch recommends using Field 2 for the panel (customer) name (RPS Panel Data - View, Panel Info tab > Panel Name).

**IP Segment**

Select an IP segment from the list of available segments.

1. Double-click IP Segment to open the drop-down list (typically there is only one choice).
2. Click the IP segment you prefer.

**Authentication profile**

Leave the Authentication profile at the default.

**Next**

Click Next to save your selections and entries.

**Select connections (SIM cards) to activate,**

**Input Method**

1. Click Manual Input.
2. Click the Connections to activate, one per line (Network ID) box.
3. Enter the 20 digit Network ID (SIM ID or ICC ID) printed on each SIM card. Press Enter after the 20th digit. Each ID begins on a new line.
4. Click Validate when finished entering IDs.
   After you click Validate, you might see the following pop-up window. If you do, click OK to continue.


**Place the order**

1. Click Add to Cart.
2. Click Place Order.

**Activation in process**

The portal shows the activation status of each communicator or SIM card. The activation process typically takes less than 10 minutes.

## 5.4.2 Activation settings and connections to activate, CDMA devices

Use the steps in each section below to configure the activation settings and choose the connections (CDMA devices) to activate. The B440 and B441 plug-in cellular communicators are CDMA devices.

**Operator (carrier)**

To choose the operator (carrier) for SIM cards:

1. Double-click Operator to open the drop-down list.
2. In the list, click the operator (carrier) for the cards you are activating. To determine the correct operator, refer to *Cellular communicator ordering information, page 7*.

**Cold price plan**

Once you choose the operator (carrier), your company's default price shows in the Cold price plan field.

1. Double-click Cold price plan to open the drop-down list.
2. Click your company's default price plan.

**Price plan**

Each price plan includes three levels of service: Backup Shared plan, Standard Share plan, and Commercial Share plan.

1. Double-click Price plan to open the drop-down list.
2. Click the appropriate plan for the cards you are activating. To learn more about price plans, refer to *Bosch Cellular Service price plans, page 41*.

**Subject**

Subject is an optional free form text field. For example, you could use it record a job name or PO number.

**Field 1 value**

Field 1 is an optional free form text field. Bosch recommends using Field 1 for the area 1 account number (RPS Panel View, Area Wide Parameters > Account Number).

**Field 2 value**

Field 2 is an optional free form text field. Bosch recommends using Field 2 for the panel (customer) name (RPS Panel Data - View, Panel Info tab > Panel Name).

**IP Segment**

Select an IP segment from the list of available segments.

1. Double-click IP Segment to open the drop-down list (typically there is only one choice).
2. Click the IP segment you prefer.

**Authentication profile**

Leave the Authentication profile at the default.

**Next**

Click Next to save your selections and entries.

**Input method**

Click Manual Input.

1. Double-click Identifier to open the dropdown menu.
2. In the menu, click MEID Hex.
3. Enter the MEID Hex for the communicator. You can enter the MEID Hex communicators, one per line. Find the MEID Hex on the communicator packaging, or on a label on the communicator itself.
4. Click Validate when finished.
   After you click Validate, you might see the following pop-up window. If you do, click OK to continue.


**Place the order**

1. Click Add to Cart.
2. Click Place Order.

# 6 Reporting and Personal Notification using Bosch Cellular Service

You can configure control panels to use a cellular communicator and Bosch Cellular Service to send reports to a central station receiver, or personal notifications (text or email) to users, or both.

These panels support both reporting and personal notification using Bosch Cellular Service: B9512G, B8512G, B6512, B5512, B4512, B3512

These panels only support reporting using Bosch Cellular Service:
D9412GV4, D7412GV4, D7212GV4, D9412GV3, D7412GV3, D7212GV3, FPD-7024

## 6.1 Configure B9512G, B8512G, and B Series panels

To configure a B9512G, B8512G, B6512, B5512, B4512, or B3512 control panel for reporting and personal notification via cellular service, follow the steps below.

1. In the Panel List, right-click the panel account you want to configure for cellular service, then click Open Panel View.
2. Panel Wide Parameters > Cellular Plug-in Module: leave the parameters at their defaults. Only change the parameters for UL1610 commercial listed installations requiring low signal notification.
3. Panel Wide Parameters > Communicator > Primary Destination Device (Backup Destination Device): to send reports for a Route Group via a cellular communicator, select a (Plug-in) Cellular Destination as the Primary (or Backup) Destination.
4. Panel Wide Parameters > Enhanced Communication: set reporting Destinations, and polling/supervision settings. Ensure that the cellular polling rates follow recommended settings and align with your cellular plan.
5. Panel Wide Parameters > Personal Notification > Personal Notification Destinations: set phone numbers for SMS messages, email addresses for email messages. Set Method to Plug in Cellular SMS, Bus Device Cellular SMS, Plug in Cellular Email, or Bus Device Email.

## 6.2 Configure D9412GV4, D7412GV4, D7212GV4, D9412GV3, D7412GV3, D7212GV3, FPD-7024 panels

To configure a D9412GV4, D7412GV4, D7212GV4, D9412GV3, D7412GV3, or D7212GV3 panel for reporting using cellular service, refer to the Release Notes, Program Entry Guide, and RPS Help for the panel.

To configure a FPD-7024 panel for reporting using cellular service, refer to the Release Notes, Installation and Operation Guide, and RPS Help for the panel.

# 7 RPS using Bosch Cellular Service

This section includes instructions for configuring RPS and your RPS workstation (computer) to connect to control panels using cellular communicators and Bosch Cellular Service.
After you add the Web Service Details for cellular service (refer to *Web services, RPS setup, page 6*), you can create and use a VPN for RPS / control panel connections. Or you can configure for cellular call back which does not require a VPN for RPS connections.

## 7.1 VPN setup for RPS workstation

Before you can use cellular service and a VPN for RPS connections to control panels, you must create a VPN client on the RPS workstation (computer).
This section includes instructions for Windows 7, Windows 8, and Windows 10.

**Notice!**
**Creating VPN client might require administrator rights**
You might require administrator rights for your RPS workstation (computer) to create a VPN client.

**VPN tips**

- When connected to the VPN, the Network Connections window and the icon on the system tray indicate Connected.
- To create a desktop shortcut to connect with fewer steps: in the Network Connections panel, right-click the VPN option and select Create Shortcut. Then, in the Shortcut dialog box, click Yes.
- To avoid data consumption, remember to disconnect from the VPN when you disconnect RPS from the control panel. Disconnecting from the VPN makes it available to another workstation.
- Only one computer at a time can use the VPN connection.

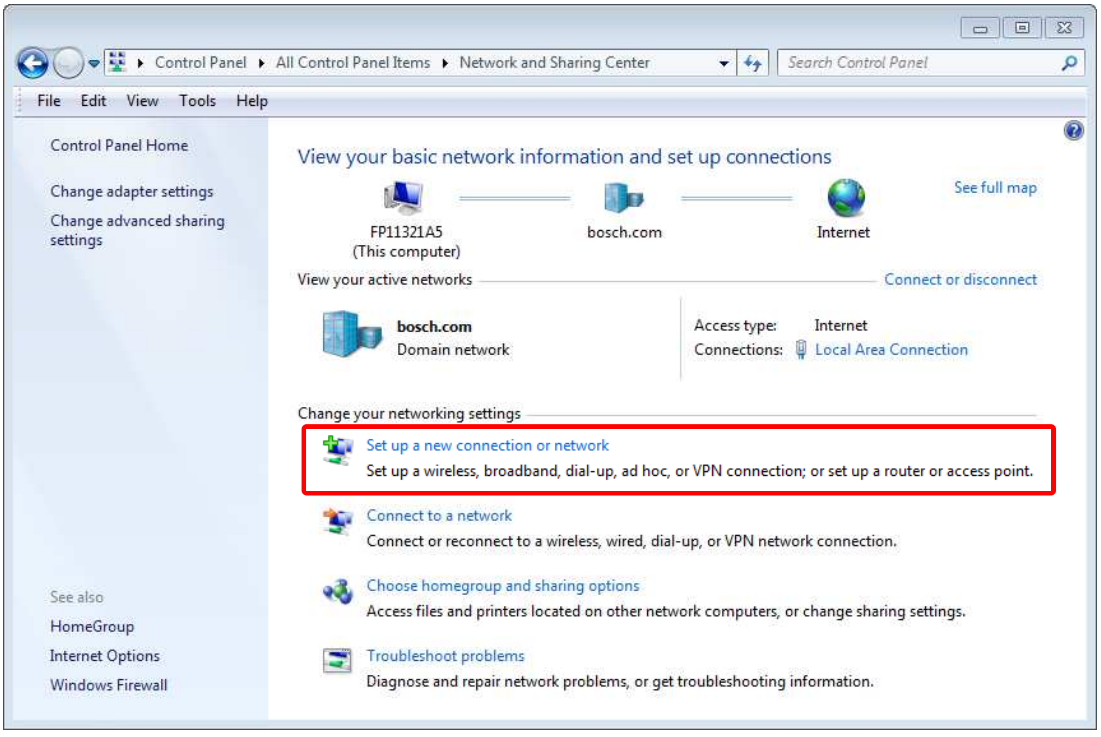
**Notice!**
**Automatic VPN disconnect for B9512G, B8512G, B6512, B5512, B4512, B3512, D9412GV4 (v2.xx), and D7412GV4 (v2.xx) control panels**
For B9512G, B8512G, B6512, B5512, B4512, B3512, D9412GV4 (v2.xx), and D7412GV4 (v2.xx) control panels, RPS automatically disconnects from the VPN after you disconnect RPS from the control panel.

### 7.1.1 Windows 7 VPN client

To create a VPN client on an RPS workstation running Windows 7, work through the sections below in order. Follow the steps in each section.

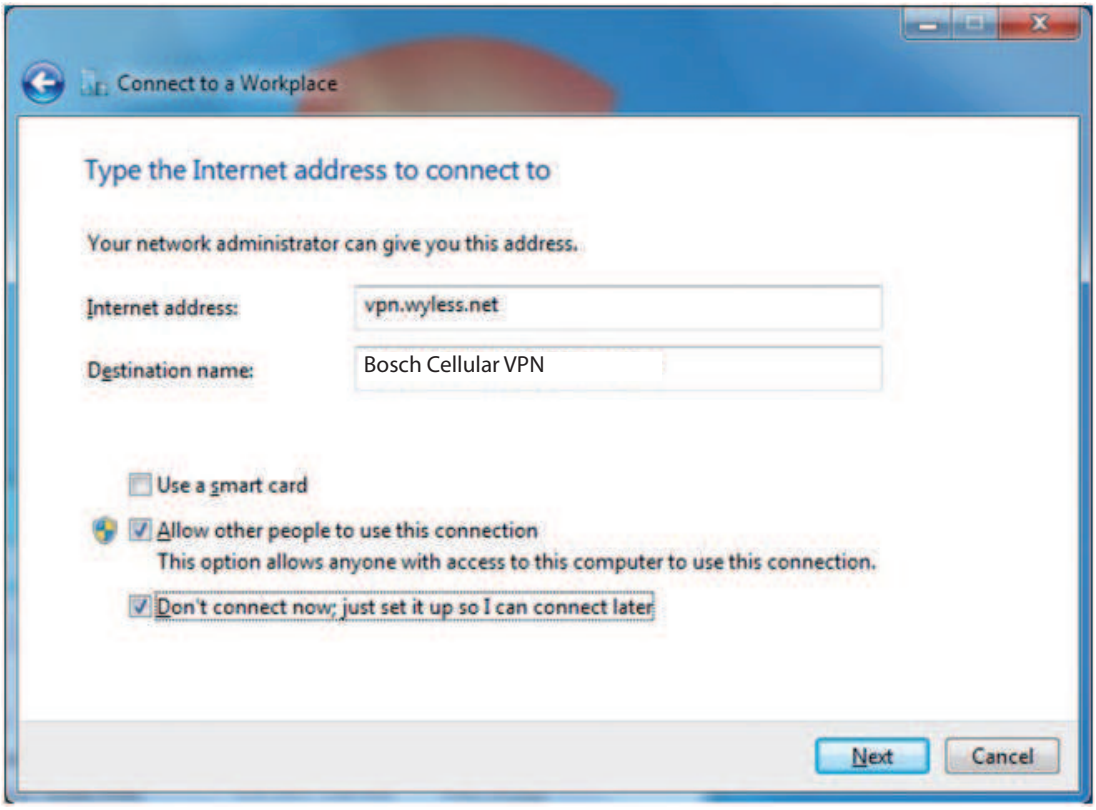
**Open the Windows Control Panel, then the Network and Sharing Center**

1. Open the Windows Control panel and select Network and Sharing Center (or Network and Internet and then Network and Sharing Center). The Network and Sharing window opens.



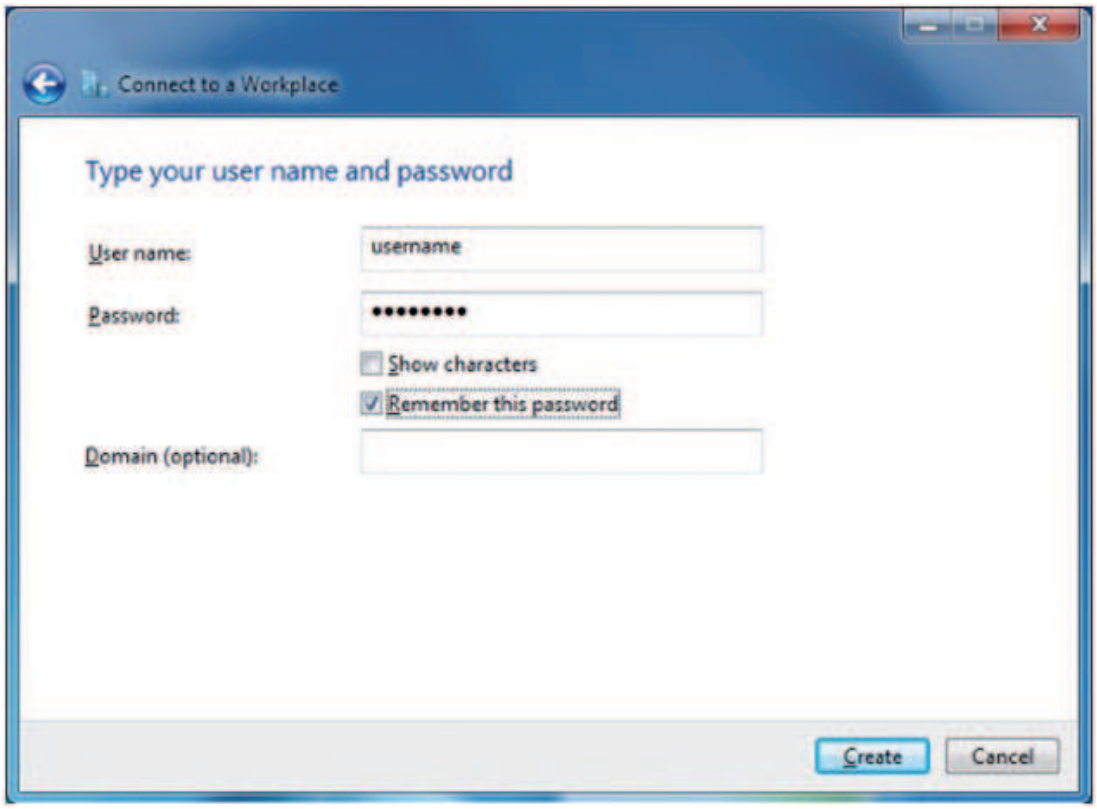

2. In the center of the window under Change your network settings, click Set up a new connection or network. The Set Up a Connection or Network window opens.
3. Click Connect to a workplace, then click Next. The Connect to a Workplace window opens.
4. Click Use my Internet connection (VPN).

**Enter internet connection (VPN) information.**




1. Internet address field: enter vpn.wyless.net.
2. Destination name field: enter *Bosch Cellular VPN*.
3. Use a smart card checkbox: deselect the checkbox (no checkmark in box).
4. Allow other people to use this connection checkbox: select the checkbox (checkmark in box).
5. Don’t connect now; just set it up so I can connect later checkbox: select the checkbox (checkmark in box).
6. Click Next to enter a username and password. Continue to the next section.

**Enter username and password**




1. In the User name and Password fields enter the User name and Password (supplied by Bosch Installer Services after the registration process).
2. Select (checkmark in box) the Remember the password checkbox to save the password for the next log in.
3. Click Create.
4. When the window shows The Connection is ready to use, click Close to return to the Network and Sharing Center. Do not click Connect.

**Change adapter settings**

1. Click Change adapter settings to open the Network Connections window.
2. Right-click the Bosch Cellular VPN option, then click Properties. The Bosch Cellular VPN Properties dialog box opens.
3. Click the Networking tab.
4. Select Internet Protocol 6 (TCP/IPv6) and click Properties.
5. In the dialog box, click Advanced. The Advanced TCP/IP Settings dialog box opens.
6. Deselect (no checkmark in box) the Use default gateway on remote network checkbox, then click OK. Click OK again to return to the Bosch Cellular VPN Properties dialog box.
7. Select Internet Protocol 4 (TCP/IPv4) and repeat the previous steps to remove the gateway option. Click OK repeatedly to return to the Network Connections panel.

**Connect to the VPN**

RPS automatically connects and disconnects from the VPN for B9512G, B8512G, B6512, B5512, B4512, D9412GV4 (v2.xx), and D7412GV4 (v2.xx) control panels.
For D9412GV4 (v1.xx), D7412GV4 (v1.xx), D7212GV4 (v1.xx), D9412GV3, D7412GV3, D7212GV3, D9412GV2 (v7.06), D7412GV2 (v7.06), D7212GV2 (v7.06), and FPD-7024 control panels you must manually connect and disconnect from the VPN.

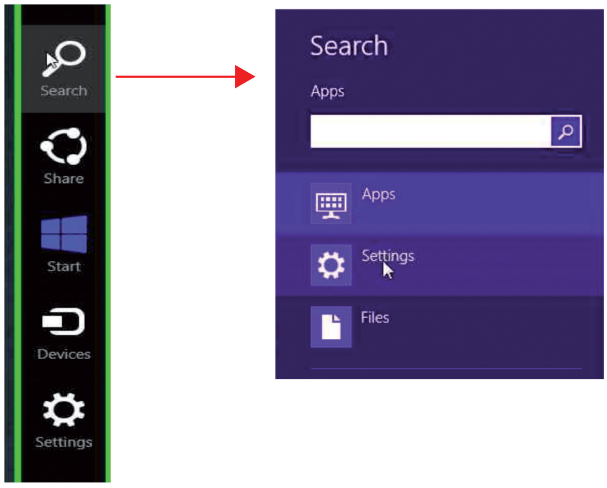
1. From the Network Connections panel, double-click the Bosch Cellular VPN option.
2. In the Connection dialog box, click Connect.

## 7.1.2 Windows 8 VPN client

To create a VPN client on an RPS workstation running Windows 8, work through the sections below in order. Follow the steps in each section.

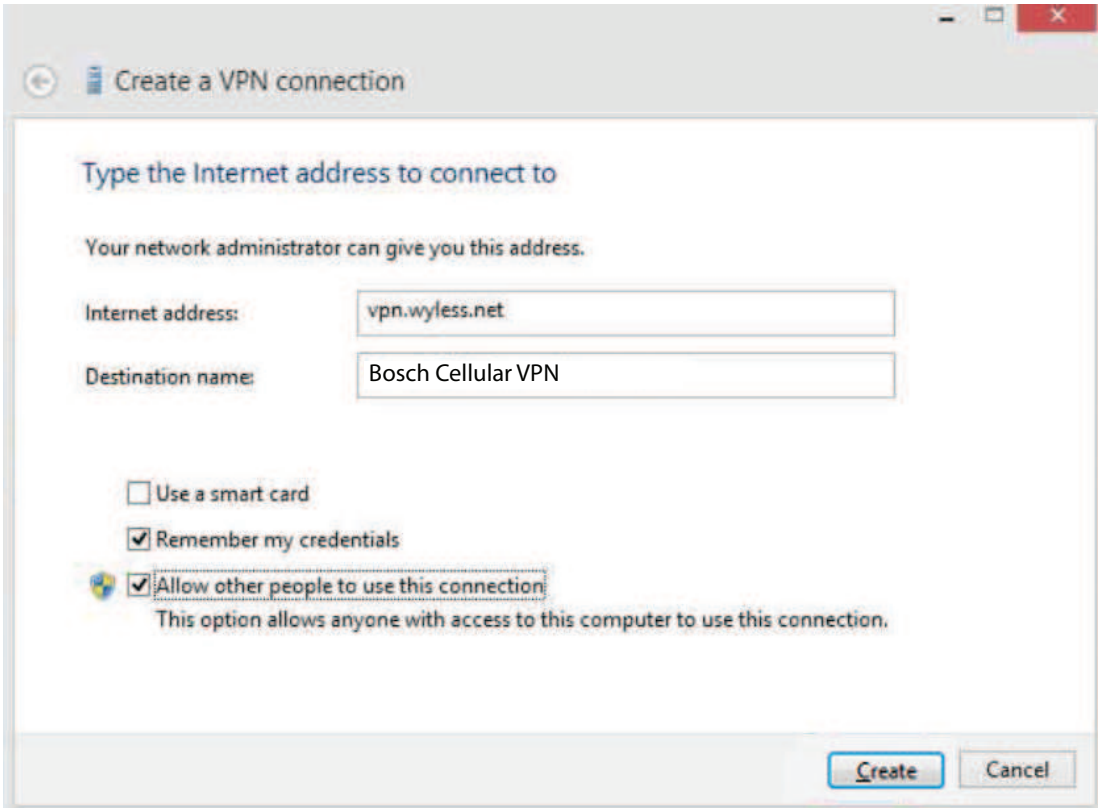
**Open the Charm bar and search for VPN setup**

1. Press [Windows]+[C] to open the Charm bar, and then click the Search icon to open the Search dialog box.




2. Select the Settings option to search Settings.
3. In the Settings search field, type VPN and press [ENTER].
4. In the results, click Set up a virtual private network (VPN) connection. The Create a VPN connection window opens.

**Create your VPN**




Follow the steps below to create a new VPN. You configure it in the next section.

1. Internet address field: Enter vpn.wyless.net.

2. Destination name field: Enter *Bosch Cellular VPN*.
3. Use a smart card checkbox: Deselect the checkbox (no checkmark in box).
4. Remember my credentials checkbox: Select the checkbox (checkmark in box).
5. Allow other people to use this connection checkbox: Select the checkbox (checkmark in box).
6. Click Create.

**Configure the new VPN**

Follow the steps below to configure the VPN.

1. Press [Windows]+[C] to open the Charm bar, then click the Settings icon to open the Settings dialog box.
2. Click the Connection Manager icon to open the Connection Manager.
3. Right-click the Bosch Wireless VPN Connection option, then click Properties. The Bosch Wireless VPN Connection Properties dialog box opens. Click the Networking tab.
4. Select Internet Protocol 6 (TCP/IPv6), then click Properties.
5. In the resulting dialog box, click Advanced. The Advanced TCP/IP Settings dialog box opens.
6. Deselect (no checkmark in box) the Use default gateway on remote network checkbox, then click OK. Click OK again to return to the Bosch Wireless VPN Connection Properties dialog box.
7. Select Internet Protocol 4 (TCP/IPv4) and repeat the previous steps to remove the gateway option. Click OK repeatedly to return to the Network Connections panel.
8. Select the Security Tab, select the Allow these Protocols option button, then select the Microsoft CHAP Version 2 (MS-CHAP v2) checkbox. Click OK.

**Connect to the VPN:**

RPS automatically connects and disconnects from the VPN for B9512G, B8512G, B6512, B5512, B4512, D9412GV4 (v2.xx), and D7412GV4 (v2.xx) control panels.

For D9412GV4 (v1.xx), D7412GV4 (v1.xx), D7212GV4 (v1.xx), D9412GV3, D7412GV3, D7212GV3, D9412GV2 (v7.06), D7412GV2 (v7.06), D7212GV2 (v7.06), and FPD-7024 control panels you must manually connect and disconnect from the VPN.

1. Press [Windows]+[C] to open the Charm bar, and then click the Settings icon to open the Settings dialog box.
2. Click the Connection Manager icon to open the Connection Manager.
3. Highlight the Bosch Wireless VPN Connection option and click Connect.
4. Enter the VPN credentials and click OK.

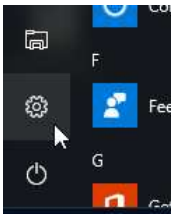
### 7.1.3 Windows 10 VPN client

To create a VPN client on an RPS workstation running Windows 10, work through the sections below in order. Follow the steps in each section.

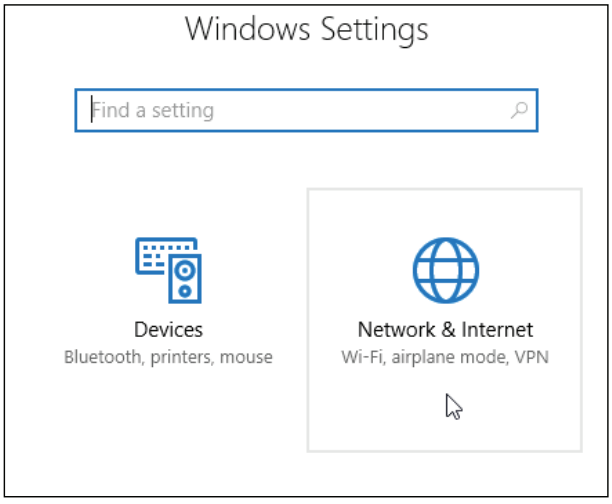
**Start with Settings**

Follow the steps below to open an Add VPN connection window.

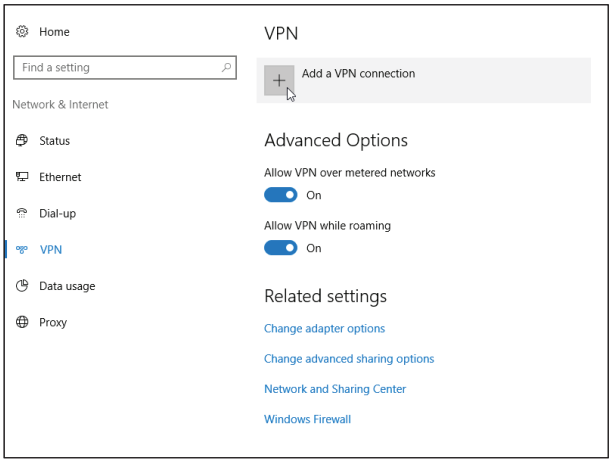
1. Click the Windows Start button, then click the Settings icon.




2. Click Network & Internet.



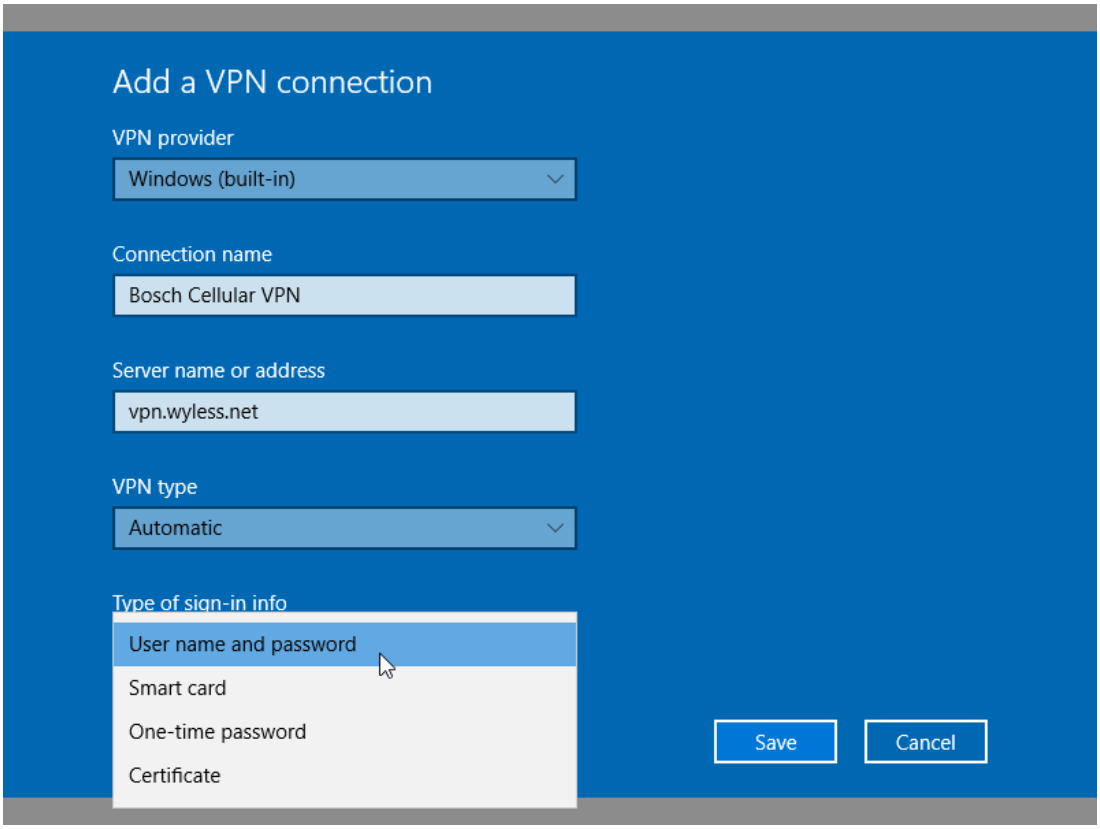

3. In the Network & Internet list, click VPN
4. Click Add a VPN connection.



### Add a VPN

Follow the steps below to create a Windows VPN for Bosch Cellular.

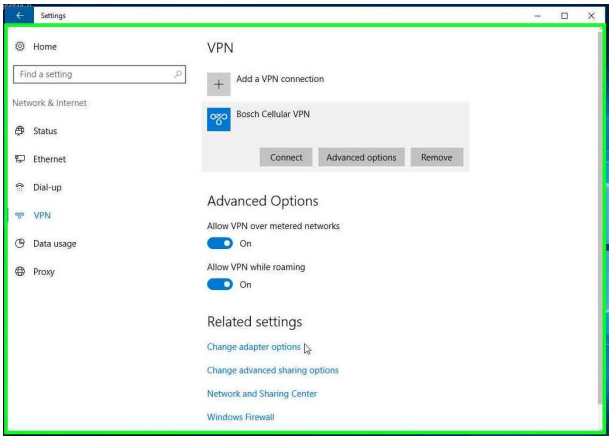
1. Click VPN provider, then select Windows (built-in).
2. Click Connection name and enter "Bosch Cellular VPN" for the connection name.
3. Click Server name or address, then enter "vpn.wyless.net" for the server name.
4. Click VPN type and select Automatic.
5. Click Type of sign in info, then select User name and password.
6. Click Save.



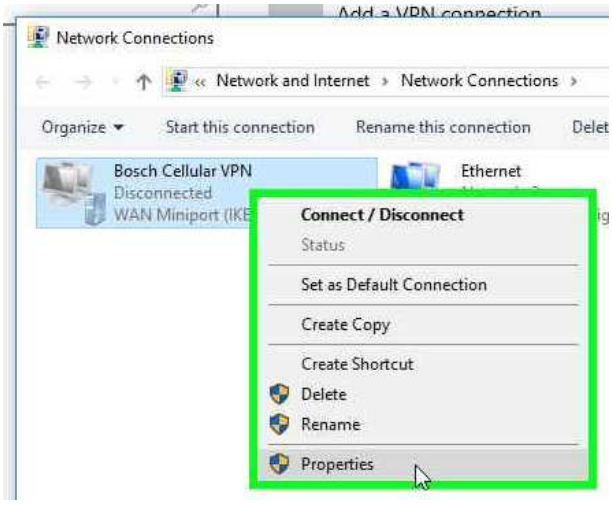
### Change the adapter options

Follow the steps below to change the adapter options for the Bosch Cellular VPN.

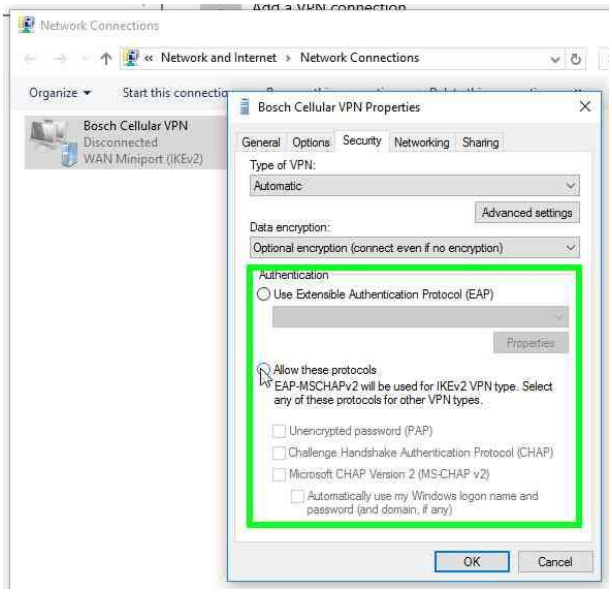
1. In the settings window, click VPN, then Under Related settings, click Change adapter options.



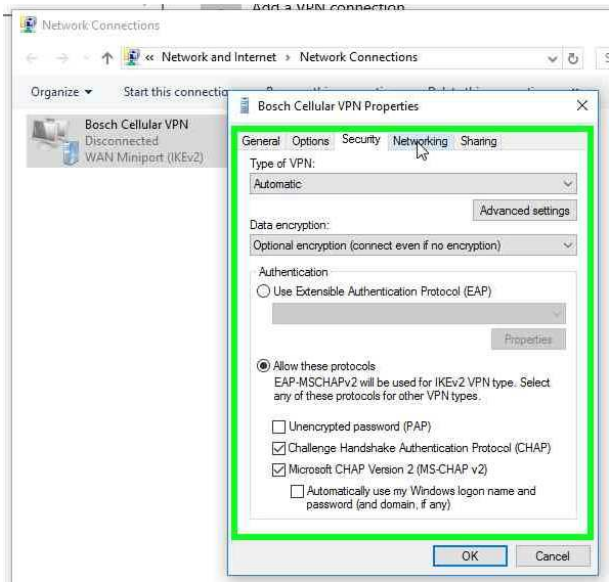

2. Right-click Bosch Cellular VPN, then click Properties.



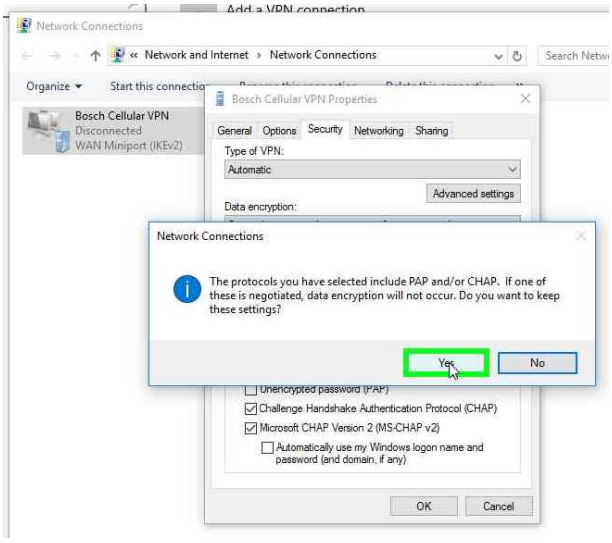

3. Click the Security tab, then select Allow these protocols.



4. Select (checkmark in the checkbox) Challenge Handshake Authentication Protocol (CHAP) and Microsoft CHAP Version 2 (MSCHAP v2), then click the Networking tab.

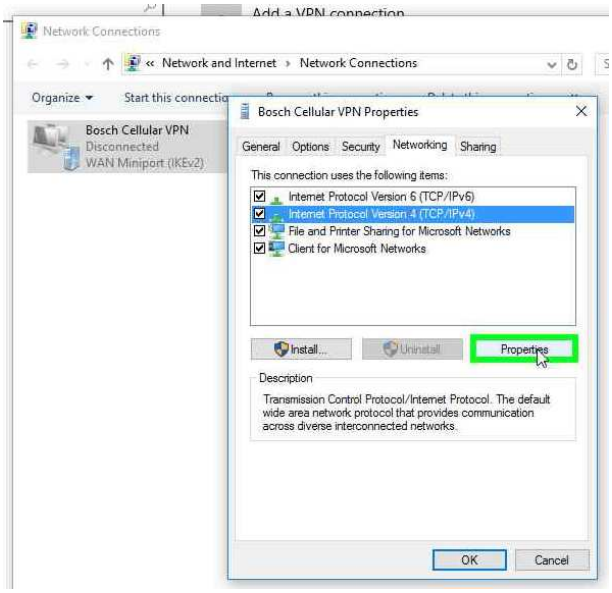



5. Click Yes in the Network Connection pop-up window.

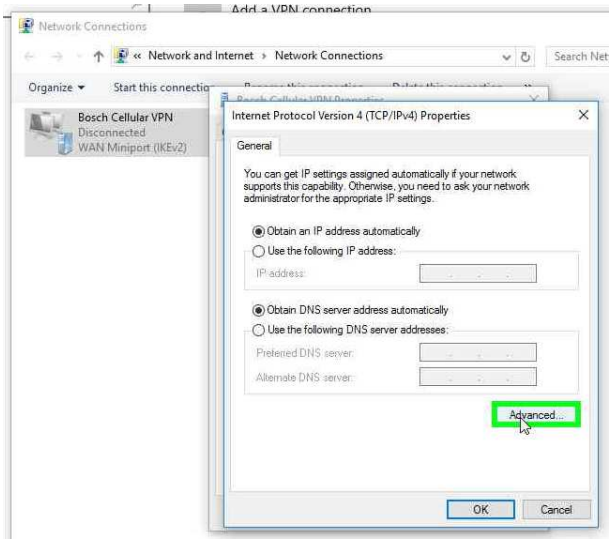


**Configure the adaptor for Internet Protocol Version 4**

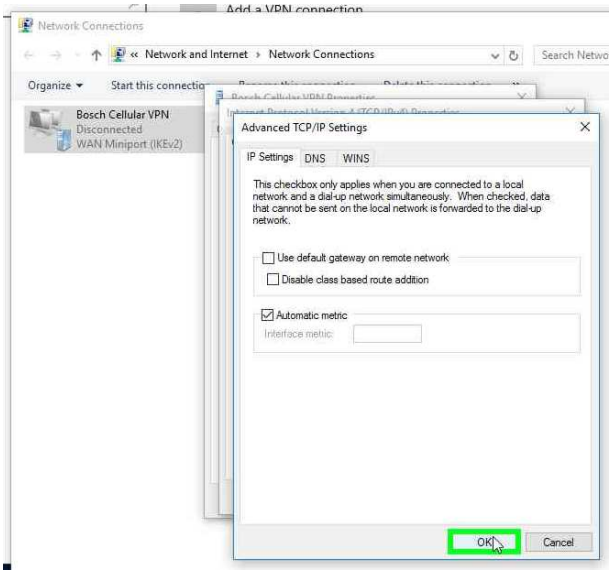
1. Click Internet Protocol Version 4, then click Properties.



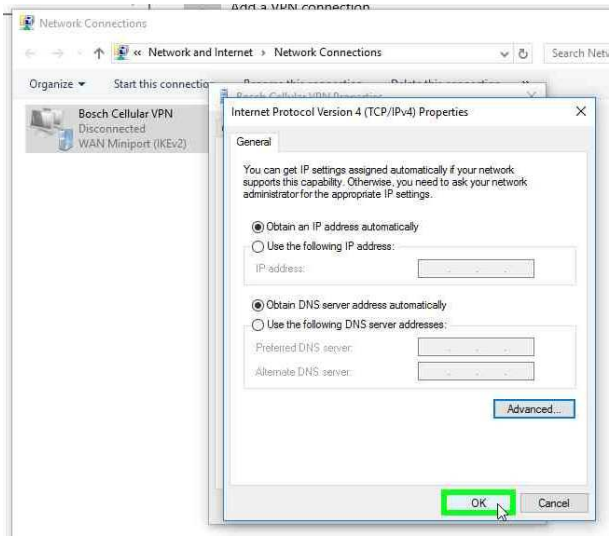

2. Click Advanced.




3. Click the Use default gateway on remote network checkbox to deselect (no checkmark in box), then click OK.

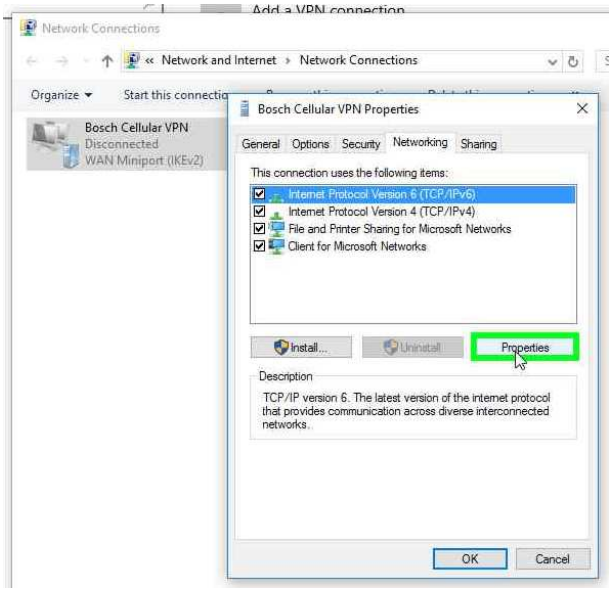

Network Connections
« Network and Internet › Network Connections
Search Netwo
Organize
Start this connectio
Bosch Cellular VPN
Disconnected
WAN Miniport (IKEv2)
Advanced TCP/IP Settings
IP Settings
DNS
WINS
This checkbox only applies when you are connected to a local network and a dial-up network simultaneously. When checked, data that cannot be sent on the local network is forwarded to the dial-up network.
Use default gateway on remote network
Disable class based route addition
Automatic metric
Interface metric:
OK
Cancel

4. Click OK.

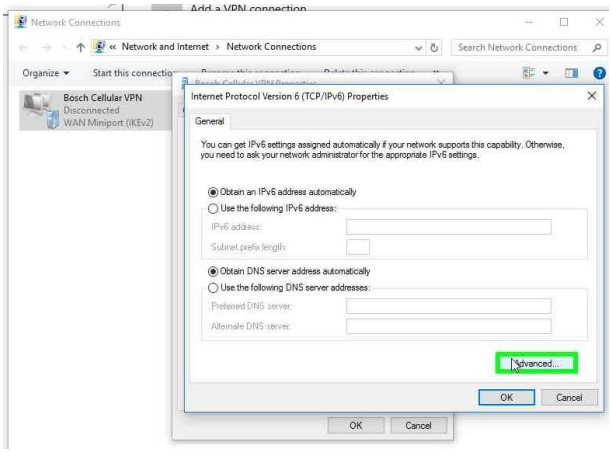

Network Connections
« Network and Internet › Network Connections
Search Netv
Organize
Start this connectio
Bosch Cellular VPN
Disconnected
WAN Miniport (IKEv2)
Internet Protocol Version 4 (TCP/IPv4) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

**Configure the adaptor for Internet Protocol Version 6**

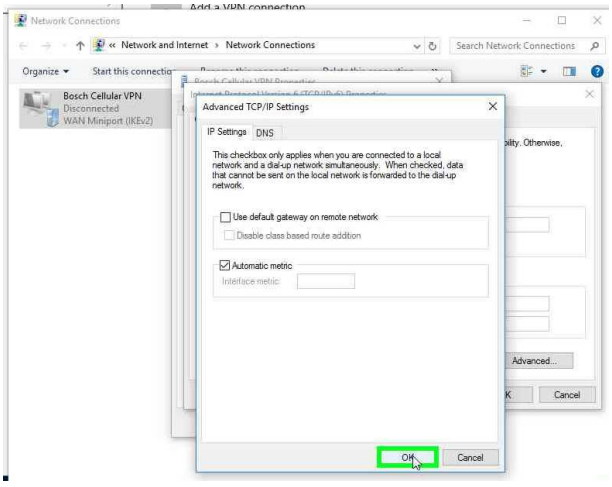
1. Click Internet Protocol Version 6, then click Properties.



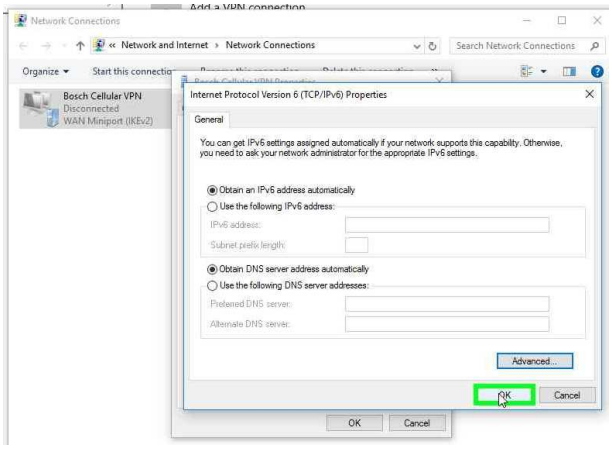

2. Click Advanced.



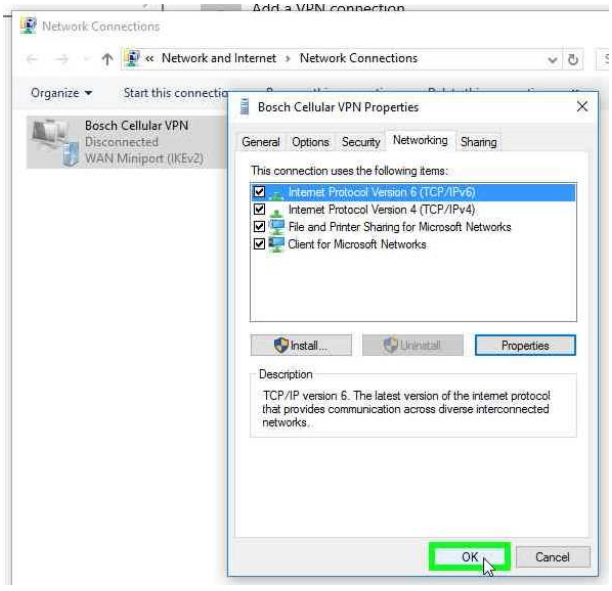

3. Click the Use default gateway on remote network checkbox to deselect (no checkmark in box), then click OK.



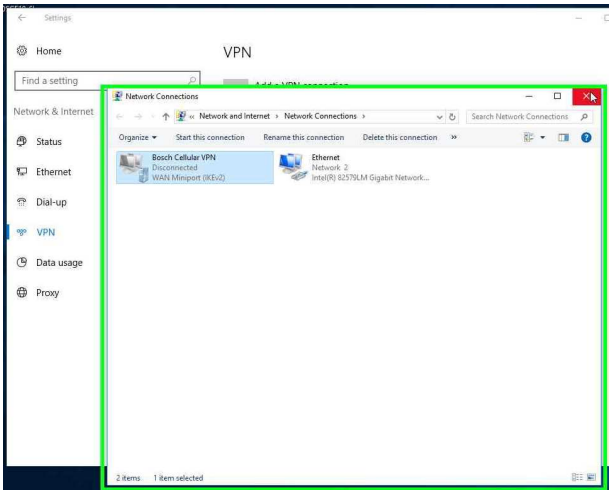

4. Click OK.




5. Click OK.

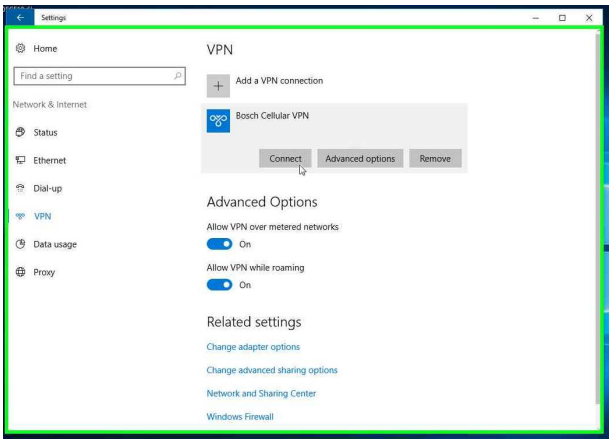



6. Close the Network Connections window.

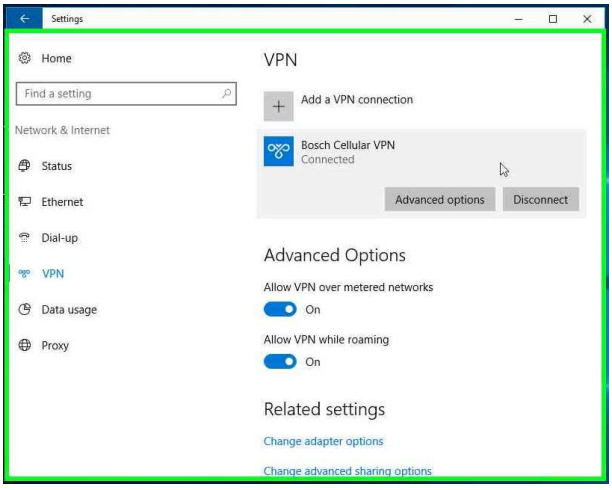


**Connect to the VPN**

1. Click Connect.



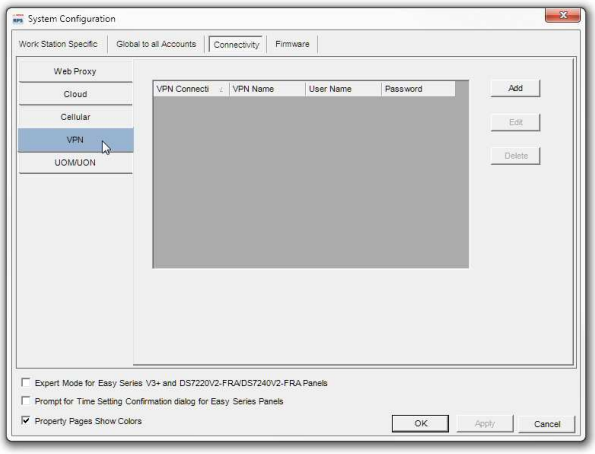

2. The VPN window shows the Bosch Cellular VPN is connected. To disconnect from the VPN, click Disconnect.




RPS automatically connects and disconnects from the VPN for B9512G, B8512G, B6512, B5512, B4512, D9412GV4 (v2.xx), and D7412GV4 (v2.xx) control panels.
For D9412GV4 (v1.xx), D7412GV4 (v1.xx), D7212GV4 (v1.xx), D9412GV3, D7412GV3, D7212GV3, D9412GV2 (v7.06), D7412GV2 (v7.06), D7212GV2 (v7.06), and FPD-7024 control panels you must manually connect and disconnect from the VPN.

### 7.1.4 Configure RPS for the VPN

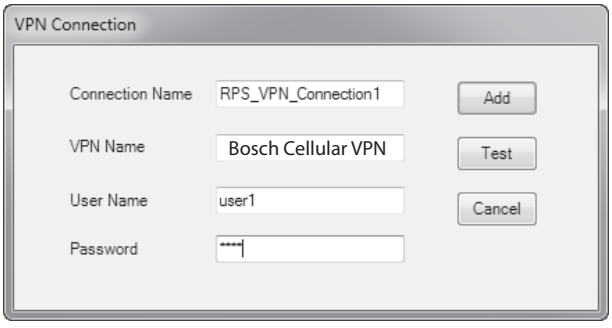
You must configure your RPS computer and RPS for a Windows VPN to initiate RPS connections to the control panel's cellular communicator (plug-in or SDI2).
Alternatively you can configure the control panel and RPS for Cellular Callback. Cellular Callback does not require a VPN.




| Button name | Description |
|---|---|
| Add | Adds a new VPN Connection. |
| Edit | Edits an existing VPN Connection. |
| Delete | Deletes an existing VPN Connection. |

**Add a new VPN connection**

Set up PPTP VPN connections on your RPS computer before you begin entering information in the fields below. For instructions on setting up a VPN, refer to the Bosch Cellular Services User Guide (available at www.conettix.com/downloads).
Click Add to open the add dialogue window.




1. Connection Name: the Connection Name appears in the connection window when you click the connect icon to connect RPS to a control panel. You can enter the VPN name as it appears on the network server, or if you do not want the VPN name visible in the connection window, enter a name of your choice in the Connection name field.
2. VPN Name: enter the name of the VPN exactly as it appears on the network server in the VPN Name field.
3. User Name: enter a valid User Name and Password for logging into the VPN.
4. Click Test to verify the VPN information and connectivity through the VPN.
5. Click Add to add the new VPN connection.

## 7.2 Cellular callback setup

To configure RPS for cellular call back:

1. In the menu bar, click Config to open the configuration menu.
2. Select System.
3. In the Work Station Specific window, click Callback Settings.

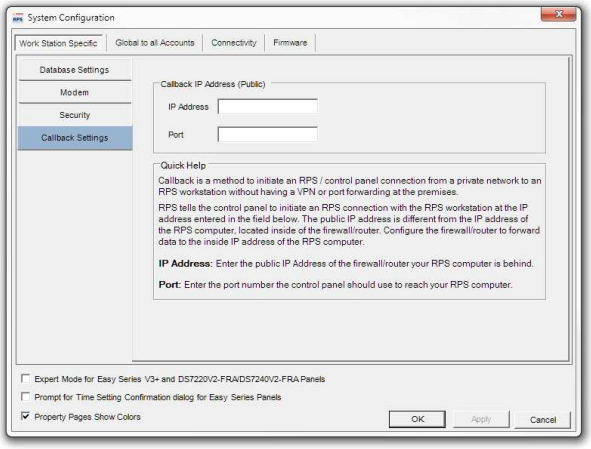
**Callback IP Address (Public)**

Callback is a method to initiate an RPS - control panel connection from a private network to an RPS workstation without a VPN or port forwarding at the premises.

RPS tells the control panel to initiate an RPS connection with the RPS workstation at the IP address entered in the field below. The public IP address is different from the IP address of the RPS computer, located inside of the firewall/router. Configure the firewall/router to forward data to the inside IP address of the RPS computer.

**IP Address**: Enter the public IP Address of the firewall/router your RPS computer is behind.

**Port**: Enter the port number the control panel uses to reach your RPS computer.




**Example router setup**

To use cellular callback for the connection between RPS and the control panel, you must enable callback on the router used by RPS. The following is an example of the steps for a Linksys Wireless-G Broadband Router with SpeedBooster. The actual steps vary by manufacturer and model.

1. Browse to the port forwarding page of the router.
2. Enter the application name for the new port forward rule (Callback in this example).
3. Enter the port number you entered in the RPS Callback Settings window.
4. Select UDP for the protocol.
5. Enter the inside IP address and select the Enable checkbox.
6. Click Save Settings to save the rule.

## 7.3 Connect to the control panel

Now that you configured your RPS and control panels for Bosch Cellular Services, you can connect RPS to control panels using cellular communication.

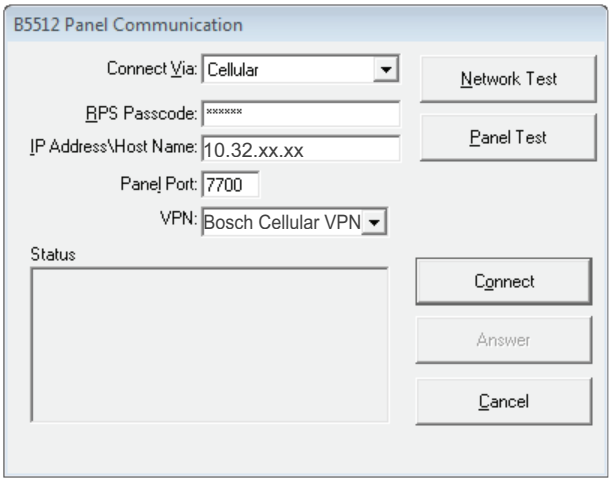
**B9512G/B8512G, B6512/B5512/B4512/B3512, D9412GV4/D7412GV4 (v2.xx) control panels**

For these control panels:

– B9512G, B8512G
– B6512, B5512, B4512, B3512
– D9412GV4 (v2.xx), D7412GV4 (2.xx)

Follow these steps to connect via Cellular (using a VPN).

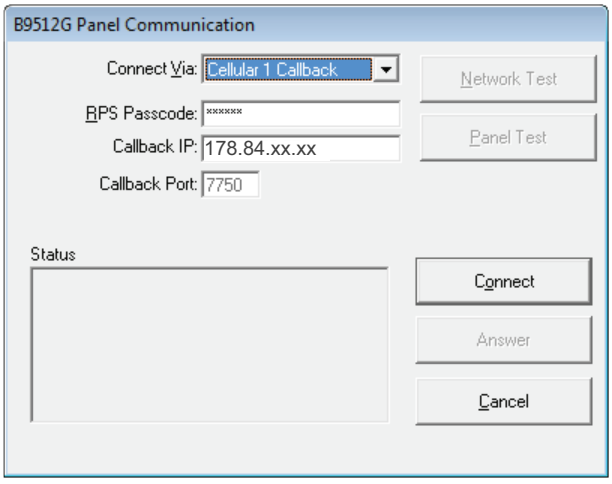
1. In the Panel List, right click the control panel you want to connect to, click Open Panel View.
2. On the toolbar, click the connect icon (or select Connect from the Operations menu). The Panel Communication dialog box opens.
3. From the Connect Via drop-down list, select Cellular. The IP address for the control panel's cellular communicator automatically populates.




4. Click Connect. RPS connects to the control panel.
5. Send and receive control panel configuration, use RPS's remote control functions, or perform diagnostics as desired.
6. When you're finished, click the disconnect icon (or select Disconnect from the Operations menu). RPS disconnects from the panel and the VPN.

Follow these steps to connect using Cellular Callback:

1. In the Panel List, right-click the control panel you want to connect to, click Open Panel View.
2. On the toolbar, click the connect icon (or select Connect from the Operations menu). The Panel Communication dialog box opens.
3. From the Connect Via drop-down list, select Cellular Callback. The Callback IP and Callback Port automatically populate.




4. Click Connect. RPS sends a notification to the control panel.
5. When available, click Answer to answer the call from the control panel.
6. Send and receive control panel configuration, use RPS's remote control functions, or perform diagnostics as desired.
7. When you're finished, click the disconnect icon (or select Disconnect from the Operations menu).

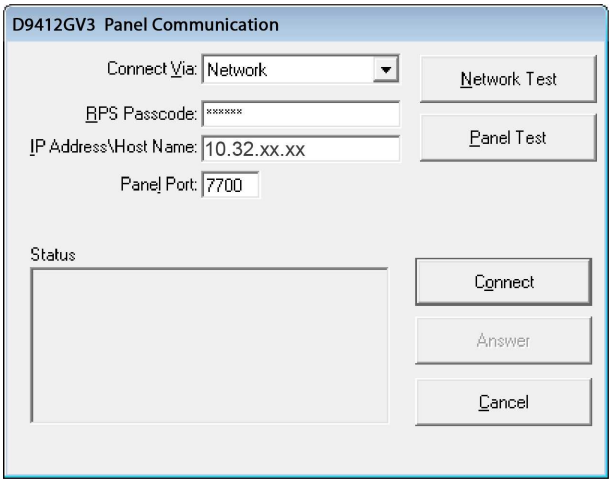
**D9412GV4/D7412GV4/D7212GV4 (v1.xx), D9412GV3/D7412GV3/D7212GV3, FPD-7024 control panels**

For these control panels:

– D9412GV4 (v1.xx), D7412GV4 (v1.xx), D7212GV4 (v1.xx)
– D9412GV3, D7412GV3, D7212GV3
– FPD-7024

Follow these steps to connect via Cellular (using a VPN)

1. Manually connect to the VPN.
2. In the Panel List, right click the control panel you want to connect to, click Open Panel View.
3. On the toolbar, click the connect icon (or select Connect from the Operations menu). The Panel Communication dialog box opens.
4. From the Connect Via drop-down list, select Network. The IP address for the control panel's cellular communicator automatically populates.




5. Click Connect. RPS connects to the control panel.
6. Send and receive control panel configuration, use RPS's remote control functions, or perform diagnostics as desired.

7. When you're finished, click the disconnect icon (or select Disconnect from the Operations menu).
8. Disconnect from the VPN.

# 8 RSC using Bosch Cellular Service

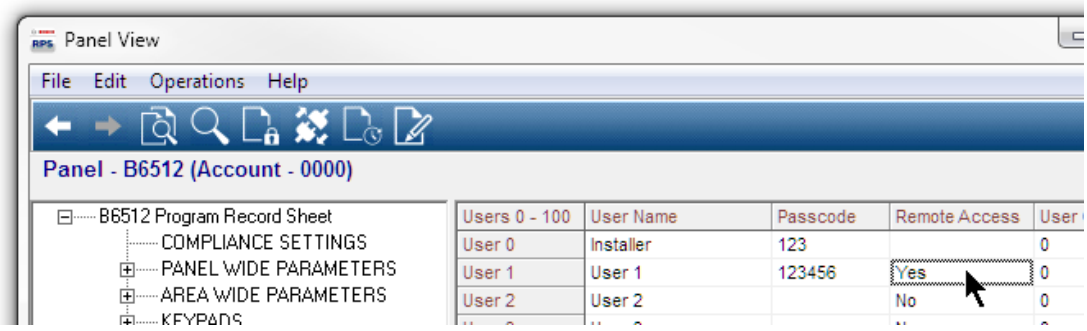
With the Bosch Remote Security Control (RSC) app, users can use their iOS or Android device to remotely turn their security system on and off. They can also turn any outputs connected to their system on or off, including thermostats, lights, garage doors, etc. RSC allows them to grant temporary or permanent access rights to other users as well.
RSC also supports Bosch IP camera integration. Users can view live video within the app.
You can use cellular service for RSC connections to the following control panels:

- B9512G/B8512G
- B6512/B5512/B4512/B3512
- D9412GV4/D7412GV4 v2.xx

## 8.1 Build a Remote Access Profile

You must build a Remote Access Profile and send it to RSC users before they can use the app to control their security system.

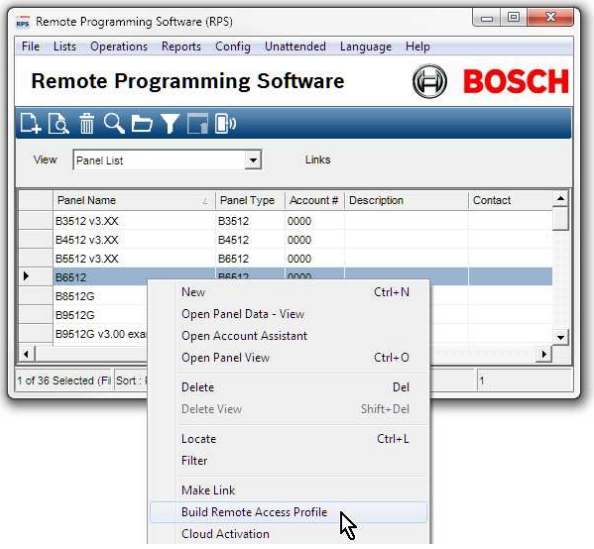
**Notice!**
**Users must also be assigned Remote Access in control panel account**
For each control panel RSC users will use the app to operate, they must also must be assigned Remote Access in the control panel account.
To assign users Remote Access, set the RPS, USER CONFIGURATION > User Assigments > Remote Access parameter to Yes.



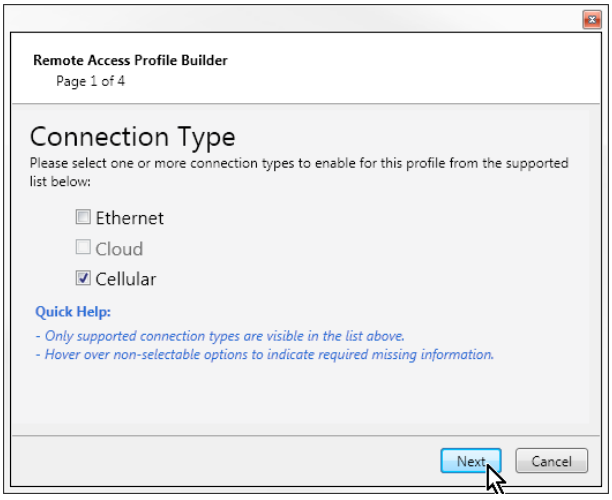

Each control panel requires its own Remote Access Profile. Each profile can be sent to multiple users.

To build a Remote Access Profile, follow the steps below to work through the four pages of the builder:

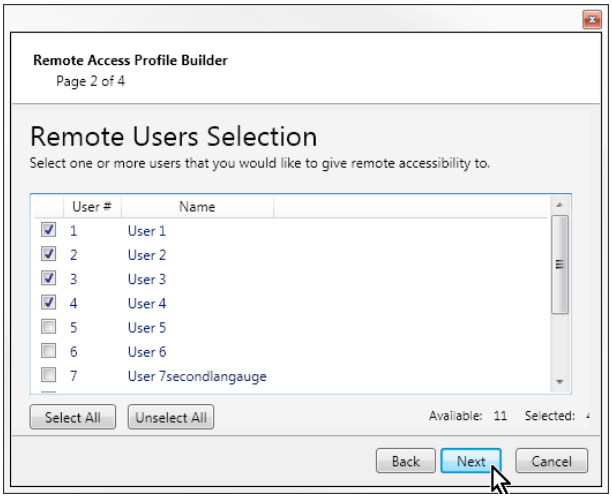
1. In the Panel List, right-click on the panel account to build a profile for. Click Build Remote Access Profile. The Remote Access Profile Builder Opens.



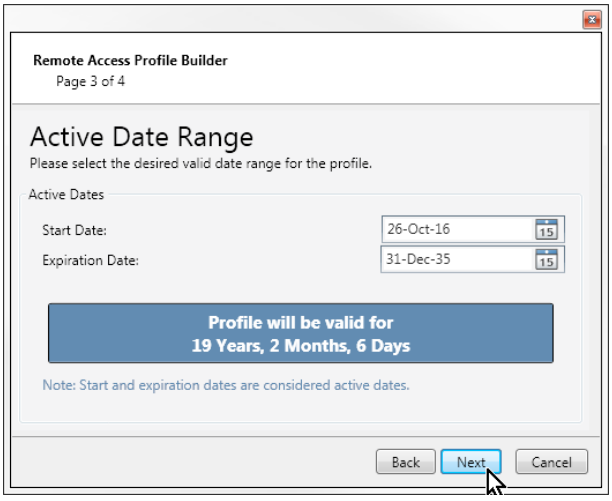

2. Click the Cellular checkbox. Then click next.



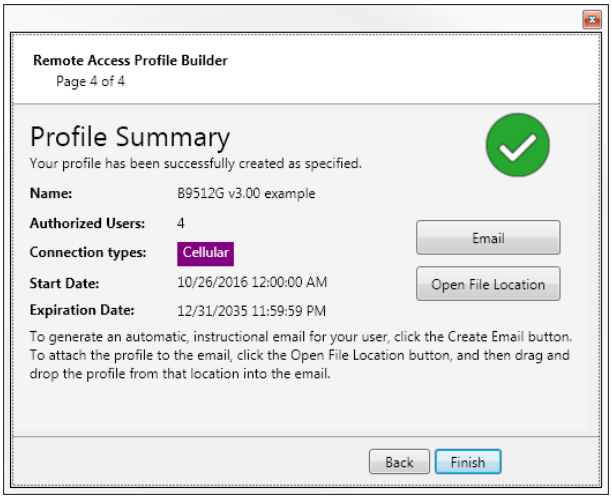

3. Select the control panel users to include in this profile for RSC. Click Next when finished.



4. Use page 3 to set the date range users can use RSC to control their security system. The active date range applies to the users you selected in step 3 above. Click Next when finished.




5. Follow the instructions on page 4 to create an instructional email and attach the profile to it. You can create an email for each user you selected in step 3 above. Click Finish when done.




After sending the profile to the users, the user finishes the enrollment using their mobile device and the RSC app.

## 8.2 Configure RSC

**Apple iOS**

Downloading Remote Security Control for Apple:

– Using Apple iTunes, download the app from the iTunes store by searching for Remote Security Control, and then sync to your Apple iOS device.

- or -

– Using the App Store on your Apple iOS device, locate and install the Remote Security Control.

**Android**

Downloading Remote Security Control for Android:

– Using the Play Store on your Android device, locate and install Bosch Remote Security Control.

Prior to using Remote Security Control, open any profiles on the user's compatible devices. To open the profile, the device must have an email client configured.

**Notice!**

**Multiple profiles on a device for multiple users**

You can open multiple profiles on a device, allowing for multiple users on each device. You can also create multiple-user profiles (multiple users in one profile).

Opening the profile for the user on the user's device:

1. Open the email app on the device. (Use the Gmail app on Android devices if receiving email using a Gmail account.)
2. Tap on the profile file to open it.
3. Follow any prompts.
4. Select the profile you want to use and tap Connect.
5. Tap the empty numeric box to launch the keypad.
6. Enter the user passcode for the user you selected when building the profile.
7. Tap Done.
8. Tap Connect to Panel.
9. Remote Security Control connects to the control panel, and the current status shows on the Security tab.

**Notice!**

**One RSC session at a time**

For D9412GV4, D7412GV4, and D7212GV4 control panels, Remote Security Control and RPS cannot connect to the control panel at the same time.

Only one RSC session can connect to a control panel at one time.

# 9 Bosch Cellular Service price plans

You need to consider how you will use cellular service when estimating data usage and choosing a plan.

- How often will the control panel check the cellular service? (supervision)
- How many reports will the control panel routinely send using cellular service? For example, will it send open and close reports?
- Will you use cellular service for personal notifications?
- Will you use cellular service for RPS connections?
- Will you use cellular service for RSC (Remote Security Control) connections?

## 9.1 Estimate data usage

This section provides information to estimate data usage so you can choose from the available service plans.

**Supervision (poll) rate**

The poll rate is the rate of cellular check-in messages. The rate is the largest contributor to monthly data usage.

- Check-in (poll) or event (alarm): 100 bytes

**Remote programming**

RPS data usage varies based on session length and the number of changes. Specific factors to consider:

- Normal Sync (users, passcodes): 5 to 10 kB
- Full download for B9512G, B8512G, B6512, B5512, B4512, B3512, D9412GV4, D7412GV4, D7212GV4 control panels: 150 kB
- Full download for D9412GV3, D7412GV3, D7212GV3, D9412GV2, D7412GV2, D7212GV2 control panels: 50 kB
- Firmware updates on B9512G, B8512G, B6512, B5512, B4512, B3512 control panels: 1.4 mB
- Firmware updates on D9412GV4, D7412GV4, D7212GV4 control panels: 700 kB
- RPS Diagnostics: Determined by session duration.

**Personal notification - text messaging**

Texting is enabled as pay-for-use in all service plans. Some plans include personal notification text bundles which offer better rates. Remember that sending personal notifications to multiple destinations uses multiple text messages.

**Remote Security Control app**

Remote Security Control data usage depends on the method of connection (direct or cloud), the number of connections, and the length of each connection. The more users and time spent online with the control panel, the more data is used.

## 9.2 Service plans

Bosch offers service plans that align with the common applications for cellular connectivity on Bosch control panels. The largest component of data usage is typically destination supervision (poll rate). Session-based applications such as RPS and Remote Security Control (RSC) can also use significant data volume.

To reduce the risk of overages, Bosch offers a shared data structure for all plans. For example, if Connection A uses 120 kB on a 100 kB plan and connection B uses 10 kB on a 100 kB plan, your account has 70 kB remaining between the two connections before an overage occurs. Find full plan information in your Bosch Cellular Service agreement. Data is shared across connections at the plan level – 100 kB, 1 mB, or 5 mB.

**Backup Shared plan**

The Backup Shared plan accommodates control panel check-ins daily and up to every 4 hours, plus alarms and very light RPS use. The plan is ideal for:

- Primary residential alarm communication with light RPS capability
- Backup commercial alarm communication with daily supervision and light RPS

**Standard Share plan**

The Standard Shared plan accommodates control panel check-ins every 4 hours up to hourly, plus alarms, Opening and Closing reports, RPS and light RSC application use. The plan is ideal for:

- Primary supervised alarm communication with Open/Close reporting
- Normal RPS sync activity and light RSC application use

**Commercial Share plan**

The Commercial Shared plan allows high supervision for primary or sole path communication in UL commercial burglary or fire applications, along with RPS or RSC application use. The plan is ideal for:

- Multi-destination cellular alarm reporting with supervision
- Heavy RPS usage or firmware upgrading over cellular
- Heavy or multi-user RSC application use

Also one of the following:

- 200 second supervision for UL1610 Commercial Burglary alarm with Open/Close reporting
- 5 minute supervision (required for UL864 Fire) with Open/Close and RPS or RSC use
- 1 to 4 hour supervision with Open/Close and frequent RPS or RSC application use

**Contact ID over Voice plan (ITS-DX4020-G SIMs only)**

The Contact ID over Voice plan allows 40 minutes of voice calling for a daily test and alarm reporting for Contact ID control panels that do not support Conettix IP.

**Text Messaging**

Some control panels support personal notification using text messaging. Texting is available on most carriers on a pay-per-use basis. Verizon Standard Shared and Commercial Shared plans include 100 free messages and reduced usage rates.

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