

Remote Programming Software (RPS)

D5500CU



Installation Manual

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1 Use latest software

Before operating the device for the first time, make sure that you install the latest applicable release of your software version. For consistent functionality, compatibility, performance, and security, regularly update the software throughout the operational life of the device. Follow the instructions in the product documentation regarding software updates.

The following links provide more information:

- General information: https://www.boschsecurity.com/xc/en/support/product-security/
- Security advisories, that is a list of identified vulnerabilities and proposed solutions: <u>https://www.boschsecurity.com/xc/en/support/product-security/security-advisories.html</u>

Bosch assumes no liability whatsoever for any damage caused by operating its products with outdated software components.

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Introduction 2

Remote Programming Software (RPS) is an account management and control panel programming utility for Microsoft Windows operating systems. Operators can perform remote programming, account storage, remote control, and diagnostics for specific control panels.

2.1 **About documentation**

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Trademarks

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Related documentation

The Release Notes provide information about RPS that became available after the release of this manual. The Release Notes list the control panels that are compatible with RPS. Refer to RPS Help for detailed instructions about how to program each of your control panel's parameters using Remote Programming Software.

3 Overview

Before you install RPS for the first time, review this section and the entire document to understand your installation options.

To install or upgrade RPS:

- You must have Windows admin rights on the target computer. After installation, RPS operators do not need administrative rights to use RPS.
- Turn off any anti-virus software to prevent possible file corruption during the installation. The anti-virus software might block and corrupt the installation files, which could result in an Unhandled Exception Error when running RPS.

Typical installation scenarios

- First time RPS installation using the provided SQL Express database defaults. Express install of RPS with the SQL Express database installed on the same computer as RPS. Refer to Express Install, page 12
- First time RPS installation using an available SQL server on the network. Refer to Advanced Install, page 16
- Upgrade an RPS installation and continue to use the existing SQL database and version in use. Refer to *Upgrade RPS*, page 36
- Upgrade an RPS installation and upgrade the existing SQL Express 2012 database to SQL Express 2017 using the RPS installer. Refer to Upgrade to SQL 2017, page 37
- Migrate an existing RPS installation to a new RPS installation by using the RPS Migrate from Existing Database option, which extracts data from an existing RPS database into the new installed version of RPS. Refer to Migrate or Upgrade existing SQL database (RPS), page 38

RPS Installer procedures

The RPS installer will guide the install/upgrade process through 3 key steps, logging activity details in the RPS Installation log. Refer to *View the installation log file*, page 24

1. Optional backup

The RPS installer will provide the option to create a backup file during an application or a database upgrade. If selected, the RPS installation creates a backup file (.bak) from a source database, making it available for restore processes if required. Backup file(s) are stored and then restored from this database to the destination database. Refer to *Create a backup file*, page 16

If this step fails, you can quit or continue with the process. Options allow you to quit the process or continue without the backup if the backup fails.

2. RPS application and SQL database install/update

The RPS installer will update the RPS application and associated SQL database to support the new RPS release updates. If this step fails, RPS will revert to the currently installed version of RPS and SQL Express if the process fails.

3. Panel account upgrade

The RPS installer will upgrade all panel accounts that have new parameters or required updates associated with the new RPS version being installed. If this steps fails, the process will continue and provide a summary of success and failures at the end of the install/upgrade process.

Failed RPS panel accounts will have some operations restricted until fixed, including sending new programming to the panel, duplicating or creating from the panel and exporting the panel.

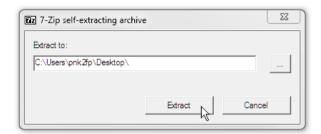
Failed panel account details are shown in the Installation Log for RPS 6.14.100 and higher versions. The Install/upgrade summary is also available in the log.

The panel account details are available for review in RPS using the RPS database settings dialog. In RPS, click **Config > System** to access the **Work Station Specific > Database Settings** dialog.

4 Download first

Before installing RPS for the first time or upgrading to the latest version, download the RPS installation file first (RPS v6.xx.exe).

- 1. When the download is complete, copy the downloaded file (RPS_v6.xx.exe) to your desktop.
- 2. Double-click the file on your desktop to begin the extraction process.
- 3. Click Extract.



The extraction process creates a folder on your desktop, RPS-Installation-Files. Go to *Install RPS*, page 9 to install RPS.



9

5 **Install RPS**

You must download the latest version of RPS before you can begin the installation process. Follow the instructions in Download first, page 8.



Notice!

Windows 32 bit operating systems

Microsoft SQL 2017 is not compatible with 32 bit operating systems. If your Windows operating system is 32 bit, the RPS installation will automatically install Microsoft SQL 2012.



Notice!

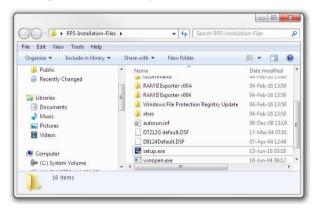
Administrator rights to install

You must have Administrator rights for installing RPS on the target computer.

5.1 Choose setup options and express, advanced install

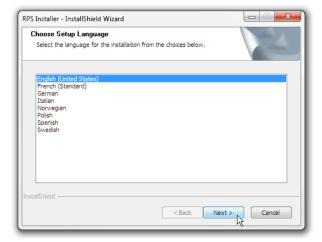
Start the installation process

- Access the RPS-Installation-Files folder.
- 2. Right-click the **setup.exe** file and select **Run as Administrator**.



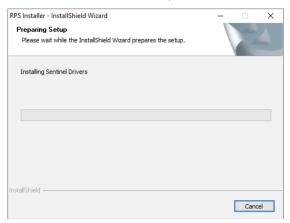
Choose the setup language

- Choose a language for the RPS setup. The default is English.
- Click Next.



Start setup process

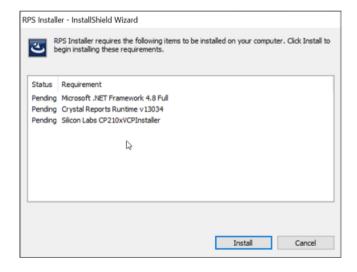
Click **Next** to start the setup, which installs the required Sentinel Drivers.



Pre-installation requirements

Before RPS is installed, these operating system requirements must be installed if not available on the installation PC:

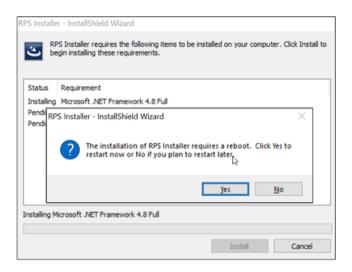
- RPS 6.14.200 and higher versions require Microsoft .NET Framework version 4.8.
- RPS 6.14.100 and higher versions require Crystal Reports Runtime version13.0.34. Click **Install** to start the installation of the pre-installation requirements.



After installing Microsoft .NET Framework 4.8, a reboot of the PC is required.

Click Yes to restart the PC.

The RPS installer will continue after the PC has rebooted.



Required installation/upgrade SQL server roles and permissions

RPS requires specific SQL Server roles and permissions for successful installation or upgrades and for RPS use and operations.

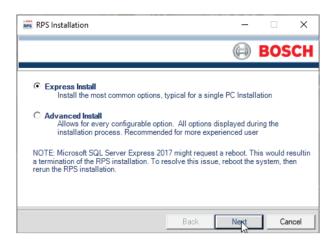
RPS installation and database creation	SQL Server role(s) and permission(s)		
RPS installation and upgrade	– sysadmin role		
Create Database within an existing RPS installation	or - other SQL Server Role with Control server permission added		
Use and operation of an existing RPS installation	SQL Server Role(s) and Permission(s)		
Upgrade Database within an existing RPS installation	– db_owner		
Create, upgrade, delete Panel Accounts			
Using File>Backup or File>Restore within an existing RPS installation			

Choose express or advanced installation

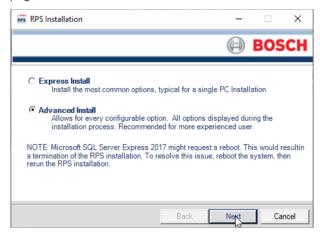
Choose the Express Install option if you are going to install RPS and the RPS database on the same computer in the default locations (folders).

Use the Advanced Install option when the RPS database will be shared among RPS workstations, or you want to install RPS and the database in folder locations other than the default folder locations.

To choose the Express Install, select Express Install and click Next. Go to Express Install, page 12.



To choose Advanced Install, select **Advanced Install** and click **Next**. Go to *Advanced Install*, page 16.



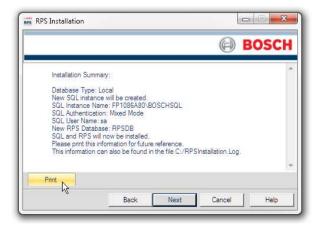
5.2 Express Install

Follow the instructions in each section below to complete the Express Install process.

Installation summary

The first window of the Express Install process shows a summary of how RPS will be installed.

Click **Print** to print the summary for future reference. Click **Next** when you are ready to continue the installation process.



Choose a destination location

By default, the RPS setup process creates an RPS folder and installs RPS in it. Click **Next** to accept the default and continue, or click **Browse** to select another folder.



Notice!

No spaces in folder name

Do not select a folder or directory with a space in its name (for example, "Program Files")



Select control panels to support and unattended operation

In the Select Features window, choose the Bosch Control panels your RPS installation supports. The default is all Bosch control panels.

You can optionally choose to install the Unattended Operation feature.



Notice!

Windows Home versions do not support unattended operation

Home versions of Microsoft Windows operating systems do not support Unattended Operation.





Notice!

Cellular callback

When using the Cellular Callback method to connect RPS with a remote panel, RPS operators will first need to stop the RPS Unattended service to avoid the Cellular Callback request being answered by the Unattended Service and performing Unattended activities. RPS will require using the Windows Run as administrator option for changing Unattended > Start Service or Stop Service.

Click **Next** to continue the installation process.



Select a program folder

By default, the RPS setup process creates a program folder for the Windows Start menu named "Bosch" (if one does not already exist), and adds RPS program icons to it. Click Next to accept the default and continue.

To create a new program folder for the Start menu with another name, enter the name in the Program Folder field, and click Next to continue.

To choose an existing program folder, select one from the Existing Folders List, and click Next to continue.



Notice!

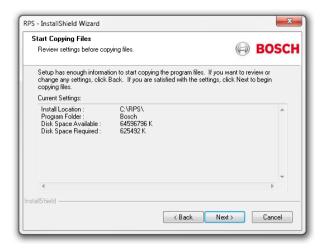
No spaces allowed in folder name

Do not select a folder or directory with a space in its name (for example, "Program Files")



Start copying files

At this point of the installation, the RPS setup process has all the information needed to copy files to the selected locations. Click Next to continue, or click Back to make changes.



RPSsvc user creation

During a new RPS installation or an RPS upgrade, a non-admin user (RPSsvc) is automatically created by the RPS installer with a reduced set of required permissions. The RPSsvc user is used by RPS to start/stop the RPSProxy and RPSService and perform Unattended operations when configured.

If the RPSsvc user creation fails during RPS installation or upgrade, the RPS installer will continue and use the local System account to start/stop the RPS services.

For higher security, it is recommended that a Windows user administrator create a Windows user account with limited permissions required to start/stop and operate the RPS services.

If you receive an RPS Service Logon as RPSsvc error during installation or upgrade, see Manually create a local user and assign to services, page 25 for instructions on how to manually create the Windows user with required permissions.

Notice!

DOS window inactive



When the RPS installation starts, the DOS screen appears and provides messages about the processing. If the DOS window becomes active by clicking inside the window, the screen will stop and remain visible. Click in the DOS window again and press the Enter key to resume and show the installation end window.

Installation complete

Click **Finish** to complete the RPS installation.

Restart your RPS computer and go to Starting RPS the first time, page 31.



5.3 Advanced Install

Follow the instructions in each section below to complete the Advanced Install process and select:

- local or network RPS database installation
- new or migrate SQL instance
- new or existing database

For database upgrades or migrations, the RPS installation provides detailed message dialogs with instructions including errors to help guide you through the process.

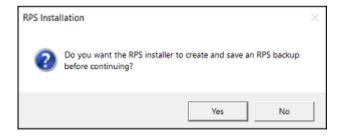
5.3.1 Create a backup file

The RPS installation enables you to optionally create a backup file during an RPS Advanced installation or during an RPS upgrade.

If selected, the RPS installation creates a backup file (.bak) from a source database and then restores this database to the destination database.

To create a backup file:

Click **Yes** in the dialog to start the process.



When the backup is successfully created, click **Next** to continue with the installation. The RPS installation will prompt you if there are errors during the creation of the backup file. For example, if the backup file creation fails, you can skip the creation step and continue with the installation.

You can also use the Config > System > Work Station Specific > Database Settings > Migrate from existing Database or Upgrade Database procedure within RPS to manually migrate or upgrade the database.

Backup file storage locations

RPS creates the backup file with the naming convention:

<RPSDBName><Datetime>.bak

Backup file folder locations for RPS upgrade (SQL 2012 to SQL 2017) types:

- SQL 2012 database instance where RPS is pointed to an RPS client PC, the backup file is stored in C:\RPSSQLBackupFiles.
- SQL 2012 database instance where RPS is pointed to a network PC, the backup file is stored in the SQL instance default backup path.
- SQL instance default path for other installation options, the backup file is stored in the SQL instance default backup path. For example, C:\Program Files\Microsoft SQL Server\MSSQL14.BOSCHSQL2017\MSSQL\Backup.

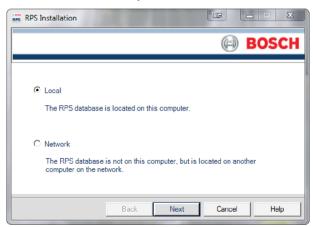
Note that the default backup path varies for each different instance and SQL version.

5.3.2 Choose local or network RPS database

Select Local to install, or use an existing, RPS database on the same computer as RPS. You can choose to share the database with other computers later in the setup process.

Select Network to use an RPS database already installed on the network. You will choose the database later in the setup process.

Click **Next** to confirm your selection and continue.

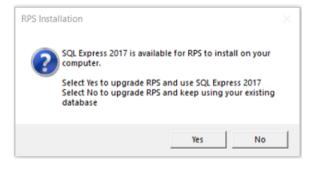


5.3.3 **SQL** version installation options

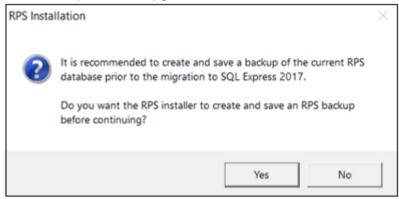
If RPS is already installed with a SQL version prior to 2017 and your Windows version supports SQL 2017, you will be presented with installation options. If your version of Windows does not support SQL 2017, the RPS Installation will continue using SQL 2012 for installations or upgrades of RPS.

The installation options are:

- Yes starts the automatic installation, upgrade, backup and restore procedures. Refer to Upgrade to SQL 2017, page 37.
- **No** continue the RPS Installation to upgrade RPS using the installed SQL version.



When prompted to create and save a backup file, select Yes if you are going to migrate the database or perform an upgrade.



Notice!



Microsoft SQL might require restart

RPS uses Microsoft SQL Server to create and manage the RPS database. On some computers, the Microsoft SQL installation might require a computer restart. This interrupts the RPS installation. To resolve this issue, restart the computer, then rerun the RPS installation.

Refer to

- Modify, repair, or remove RPS, page 43
- RPS database backup and restore (manual process), page 40

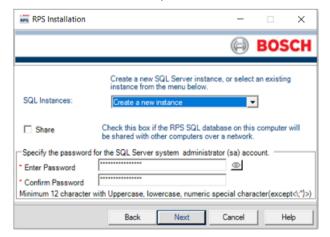
5.3.4 Create new or select existing SQL instance

RPS uses an "instance" of Microsoft SQL Server to create and manage the RPS database. If you are installing RPS for the first time, you need to create a new SQL instance for RPS. Go to Create new SQL instance, page 18.

To use an existing SQL instance (RPS database), go to Use existing SQL instance, page 19.

5.3.5 Create new SQL instance

Select the Share check box to share the RPS database on the same computer as this SQL instance with other computers, and automatically start the SQL browser service. This service allows other computers to access the local SQL instance.



Click Next to create a new SQL instance:

SQL Instance Name: BOSCHSQL

If BOSCHSQL is already used, the new instance is named BOSCHSQLn, where n = a number. For example, BOSCHSQL1.

- 2. Authentication: SQL Server Authentication
- 3. User Name: sa
- 4. **Password:** B@SCHRPSsgl12345

Click Next to create the new SQL instance. Go to Create new RPS database or use existing, page 20.

Share option for AMS

In some cases, AMS might stop working after RPS is installed on the same PC. There are 2 ways to resolve this issue:

- Share the RPS database during the RPS installation. Without the Share checkbox option selected, the RPS installation will disable the SQL browser service.
- Manually start the SQL browser service after installing RPS.

5.3.6 Create SQL password

The Advanced installation allows you to create an administrator password for SQL when creating a new SQL instance.

To set a password for the SQL server instance:

- Select the SQL Instance from the drop-down menu.
- Type the password in Enter password field. Click the eye icon to see the password as you type.
- 3. Retype the password in the Confirm password field.
- 4. Click Next to continue.

Notice!

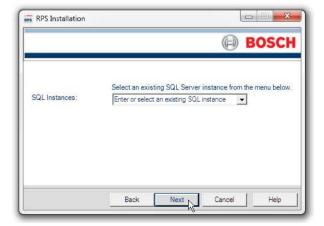


Note custom password

Be sure to note the custom SQL system administrator (sa) password you created so that you remember it in the future. You will need this password to re-establish or change the RPS connection to the SQL database.

5.3.7 **Use existing SQL instance**

On the SQL Instance window, select the appropriate SQL instance from the drop-down list. Authentication of the selected SQL instance starts.



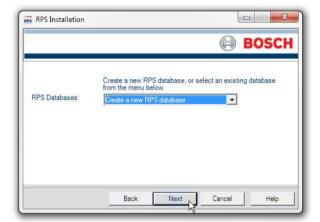
- By default, Windows Authentication is used. If the authentication fails, you are prompted to use SQL Authentication.
 - To use SQL Authentication, check SQL Authentication, then enter your SQL user name (sa is the default) and password (B@SCHRPSsql12345 is the default).
- Click Next. The RPS Database window opens. Go to Create new RPS database or use existing, page 20.

5.3.8 Create new RPS database or use existing

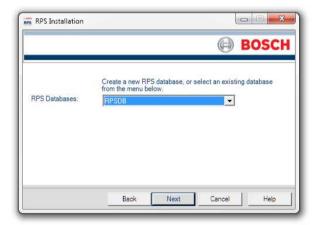
To create a new RPS database, select Create a new RPS database, then click Next.

The installation process creates a database named RPSDB.

If RPSDB is already used, the new database is named RPSDBn, where n = a number. For example, RPSDB1.



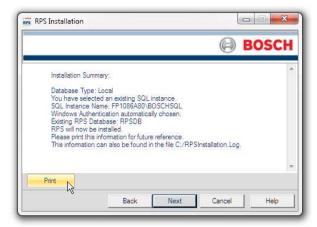
To use an existing database, select one from the RPS Databases drop-down list, then click Next.



5.3.9 **Installation Summary**

The Installation Summary window shows how RPS will be installed.

- To change any settings, click Back.
- To print the installation summary for future reference, click **Print**.
- To continue the installation process, click **Next**.



Choose a destination location

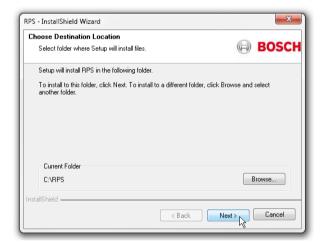
By default, the RPS setup process creates an RPS folder and installs RPS in it. Click Next to accept the default and continue, or click Browse to select another folder.



Notice!

No spaces in folder name

Do not select a folder or directory with a space in its name (for example, "Program Files")



Select control panels to support and unattended operation

In the Select Features window, choose the Bosch Control panels your RPS installation supports. The default is all Bosch control panels.

You can optionally choose to install the Unattended Operation feature.



Notice!

Windows Home versions do not support unattended operation

Home versions of Microsoft Windows operating systems do not support Unattended Operation.

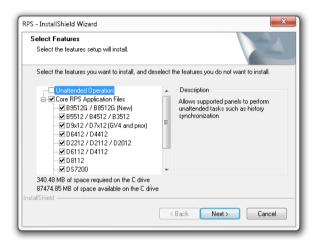
Notice!



Cellular callback

When using the Cellular Callback method to connect RPS with a remote panel, RPS operators will first need to stop the RPS Unattended service to avoid the Cellular Callback request being answered by the Unattended Service and performing Unattended activities. RPS will require using the Windows Run as administrator option for changing Unattended > Start Service or Stop Service.

Click **Next** to continue the installation process.



Select a program folder

By default, the RPS setup process creates a program folder for the Windows Start menu named "Bosch" (if one does not already exist), and adds RPS program icons to it. Click Next to accept the default and continue.

To create a new program folder for the Start menu with another name, enter the name in the **Program Folder** field, and click **Next** to continue.

To choose an existing program folder, select one from the Existing Folders List, and click Next to continue.



Notice!

No spaces allowed in folder name

Do not select a folder or directory with a space in its name (for example, "Program Files")



Start copying files

At this point of the installation, the RPS setup process has all the information needed to copy files to the selected locations. Click **Next** to continue, or click **Back** to make changes.



RPSsvc user creation

During a new RPS installation or an RPS upgrade, a non-admin user (RPSsvc) is automatically created by the RPS installer with a reduced set of required permissions. The RPSsvc user is used by RPS to start/stop the RPSProxy and RPSService and perform Unattended operations when configured.

If the RPSsvc user creation fails during RPS installation or upgrade, the RPS installer will continue and use the local System account to start/stop the RPS services.

For higher security, it is recommended that a Windows user administrator create a Windows user account with limited permissions required to start/stop and operate the RPS services. If you receive an RPS Service Logon as RPSsvc error during installation or upgrade, see Manually create a local user and assign to services, page 25 for instructions on how to manually create the Windows user with required permissions.





DOS window inactive

When the RPS installation starts, the DOS screen appears and provides messages about the processing. If the DOS window becomes active by clicking inside the window, the screen will stop and remain visible. Click in the DOS window again and press the Enter key to resume and show the installation end window.

Installation complete

Click Finish to complete the RPS installation.

Restart your RPS computer and go to Starting RPS the first time, page 31.



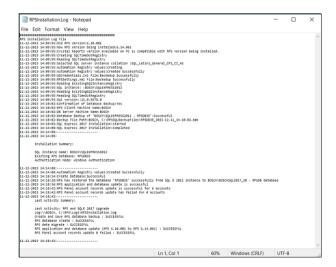
View the installation log file 5.4

During installation, RPS creates the RPSInstallation.log file, and logs the entire installation process in the file. The file is located in X:\RPS\Logs ("X" = the drive letter on the computer where RPS is installed).

Use the installation log file for troubleshooting purposes or if you need original RPS database information after an upgrade, such as the encrypted password.

The installation log file contains the following:

- All installation log entries with summary information
- Database file transfer information
- RPS database information
- PC name where the installation operation was done
- Last activity summary
- Errors and possible solutions



5.5 Manually create a local user and assign to services



Notice!

MS Windows administration required

This activity requires the Windows administrative ability to create and modify a Windows user and grant specific Windows permissions. Contact your Windows user Administrator if necessary.

During a new RPS installation or an RPS upgrade, a non-admin user (RPSsvc) is automatically created by the RPS installer with a reduced set of required permissions. The RPSsvc user is used by RPS to start/stop the RPSProxy and RPSService and perform Unattended operations when configured.

If the RPSsvc user creation fails during RPS installation or upgrade, the RPS installer will continue and use the local System account to start/stop the RPS services.

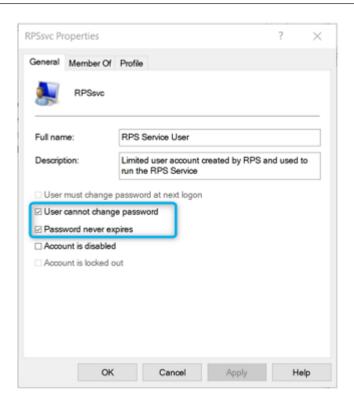
For higher security, it is recommended that a Windows user administrator create a Windows user account with limited permissions required to start/stop and operate the RPS services. The manual local user (RPSsvc) creation steps include:

- 1. Create a Windows NT user.
- 2. Assign Local Launch and Local Activation permission.
- 3. Assign the service as logon right (**Log on as a service**).
- 4. Assign RPSsvc user to RPSProxy and RPSService.
- 5. Provide Launch and Activation permission (required for user to run Unattended operations)
- 6. Assign start/stop service permission to RPSService (required for Unattended operations).

Create Windows NT user

To create the RPSsvc user:

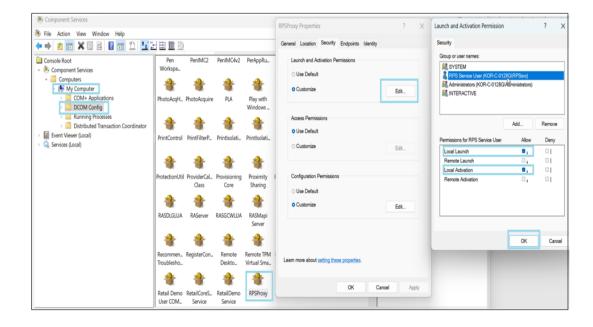
- 1. Create a Windows NT user: username RPSsvc, full name RPS Service User
- 2. Assign to the Users group.
- 3. After the user is created, select User cannot change password and Password never expires.



Assign Local Launch and Local Activation permission

To assign Local Launch and Local Activation permissions:

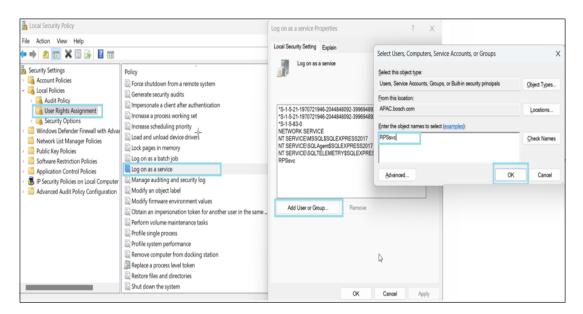
- Open component services from **Start>Windows** or run **dcomcnfg** from Windows Run. 1.
- 2. Go to Component Services>My Computer> DCOM Config>RPSProxy and right-click to access Properties.
- Add the RPSsvc user to the list. 3.
- Assign Local Launch and Local Activation permissions. These permissions are required, as RPSService is dependent on RPSProxy.



Assign the service as logon right

To give the Log on as a service right to the RPSsvc user:

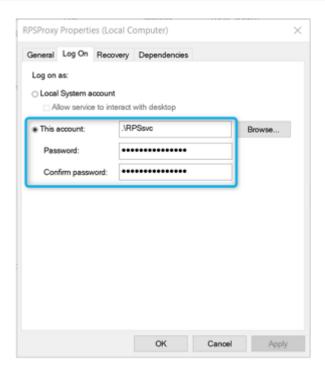
- Go to Local Security Policy from Windows Start.
- Go to Local Policies>User right assignment>Logon as a service.
- Double-click Log on as a service. 3.
- Click Add User or Group.
- Add the RPSsvc user under Log on as a service.



Assign RPSsvc user to RPSProxy and RPSService

To assign RPSsvc user to RPSProxy and RPSService:

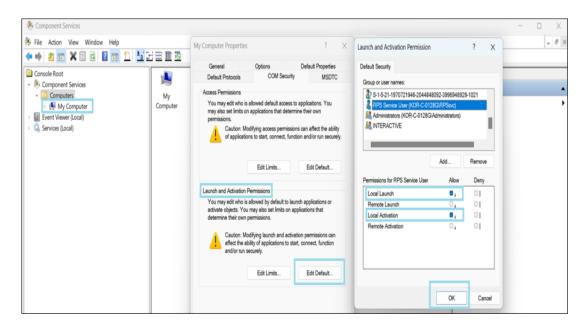
- Go to services.msc from Windows Run.
- Locate RPSProxy>Properties>LogOn.
- Select this account and enter the credentials of the RPSsvc user.
- 4. Click Apply.
- Repeat this procedure to assign the RPSsvc user to RPSService.



Provide Launch and Activation permission

To provide Launch and Activation permissions:

- Open Component Services from Start>Windows or run dcomcnfg from Windows Run.
- Go to Component Services>My Computer.
- 3. Right-click My Computer and select Properties>COM Properties.
- 4. Click Edit defaults for Launch and Activation permissions.
- 5. Add the newly created RPSsvc user.
- Add Local activation rights to the RPSsvc user to allow the user to run Unattended operations.



Assign start/stop service permission to RPSService (required for Unattended operations)

To assign start/stop service rights to RPSService:

- 1. With administrator rights, open a Windows command prompt.
- Type the command SC sdshow RPSService and press <Enter> to display the security descriptor of the RPSService.
- 3. Add the SID of the RPSsvc user after the string **D**: to the security descriptor, which is DACL in this example. This is the new security descriptor that you will use in the next step.
- Type the command **SC sdset RPSService** *new security descriptor*.
- Press **<Enter>** to process the command.

```
soft Windows [Version 10.0.19045.4651]
(c) Microsoft Corporation. All rights reserved.
 :\Windows\system32>sc sdshow RPSService
D:(A;;RPWPDT;;;S-a-b-cc-xxxxxxxxxxyyyyyyyyyyzzzzzzzzzzzz)(A;;CCLCSWRPWPDTLOCRRC;;;SY)(A;;CCDCLCSWRPWPDTLOCRSDRCWDWC
;;;BA)(A;;CCLCSWLOCRRC;;;IU)(A;;CCLCSWLOCRRC;;;SU)
 :\Windows\system32>
```

Example:

- Add the SID to the string (A;;RPWPDT;;;. The string will be: (A;;RPWPDT;;;S-a-b-cc-
- 2. Add the resulting Security Descriptor after **D**:. The final security descriptor will be D: (A;;CCLCSWRPWPDTLOCRRC;;;SY)(A;;CCDCLCSWRPWPDTLOCRSDRCWDWO;;;BA) (A;;CCLCSWLOCRRC;;;IU)(A;;CCLCSWLOCRRC;;;SU)
- Type the command **SC SDSET RPSService** *new security descriptor*.
- Press <Enter> to process the command.

```
(c) Microsoft Corporation. All rights reserved.
C:\Windows\system32>SC SDSET RPSService D:(A;;RPWPDT;;;S-a-b-cc-xxxxxxxxx-yyyyyyyyy-zzzzzzzzzzzzzz)(A;;CCLCSWRPWPDTLO
CRRC;;;SY)(A;;CCDCLCSWRPWPDTLOCRSDRCWDWO;;;BA)(A;;CCLCSWLOCRRC;;;IU)(A;;CCLCSWLOCRRC;;;SU)
SC1 SetServiceObjectSecurity SUCCESS
  \Windows\system32>_
```

5.6 RPS installation scenarios that might affect RPSsvc user

Repair RPS application from the control panel

An RPS application repair will assign the RPSProxy service to start/stop using the local system user by default. In this case services can be assigned to a local user. See Manually create a local user and assign to services, page 25.

Modify RPS application from the control panel

If RPS is installed without Unattended and an RPS installer selects to Modify the installation, and then installs Unattended, the RPSService is assigned to start/stop using the local system user by default.

The RPS services (RPSProxy and RPSService) must be manually configured to start/stop and operate using a different Windows user. See Manually create a local user and assign to services, page 25.

RPSsvc user is deleted after RPS is installed (RPS v6.15.xxx or higher installations)

If the Windows user used to start/stop and operate the RPS services (RPSProxy and RPSService) is deleted, then the RPS services will not operate and must manually be set to start/stop using the Local system user or a different Windows user. See Manually create a local user and assign to services, page 25.

RPS installer changes the password of RPSsvc user (RPS v6.15.xxx or higher installations)

If the RPSsvc user password is changed, the RPS Services (RPSProxy and RPSService) must be updated manually with the new password and the new password must be assigned in RPS>Unattended>Startup.

Note that assigning the password to RPSService is required only if Unattended is installed.



Database access for RPSsvc user

If RPS is pointing to a database that does not have database access to the RPSsvc user, create a new database user with:

- username 'machineName\RPSsvc'
- permissions: dt_datareader and dt_datawriter.

An alternative method to access the database is:

- Open RPS and go to Config menu>System>Work Station Specific>Database Settings.
- Use sa for the username and the password of the database instance.

Starting RPS the first time 6

The sections that follow describe starting RPS for the first time for a new RPS installation. If you are starting RPS for the first time after upgrading to the latest version, enter your user name and password from the prevision version to log in and begin using RPS.

6.1 **Default Login**

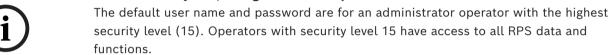
Use the default user name and password for your first log in.

User Name: admin

Password: default (or 1111)

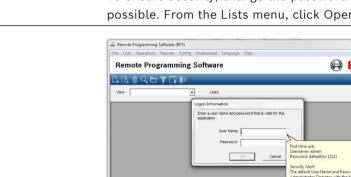
Notice!

Reduce security risk, change the default password



To ensure security, change the password for the administrator operator as soon as possible. From the Lists menu, click Operators, and then press F1 for help.



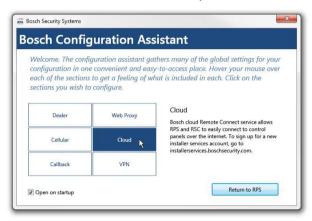


Configuration Assistant 6.2

When you log in to a new RPS installation for the first time, the Configuration Assistant automatically opens. The configuration assistant gathers the global RPS settings that configure RPS to support Bosch Cellular Services, Bosch Remote Connect (a Cloud-based Service), a Web Proxy, a VPN, and the RSC app for mobile devices.

- Hover your cursor over a section to learn about the settings that are included.
- Click the section to configure the settings.

When finished with the assistant, click Return to RPS.





Notice!

Required SSL and TLS versions for Cloud connection

To connect RPS to a control panel remotely using Cloud (Remote Connect), SSL version 3.0 and TLS version 1.2 must enabled on the computer running RPS.

6.3 **Account Assistant**

The Account Assistant is the default view for creating and editing B Series control panel accounts for the administrator and new RPS operators.

The Account Assistant combines key parameters from the Panel Data - View and the Panel View to help operators quickly create or edit B series panel accounts in a single view.

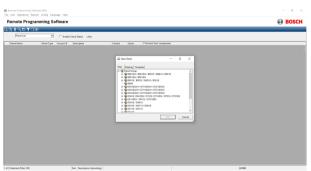
Create a new B Series control panel account

To start, click the new (panel) icon in the Panel List toolbar. If this is the first new account in the list, a help bubble directs you to the icon.



Select a B Series control panel from the B Series panel group (B6512, B5512, B4512, B3512).

Click OK.



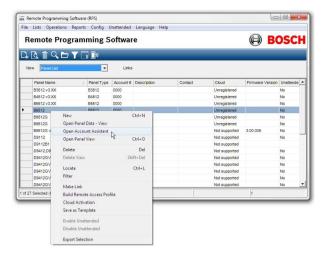
Work through the Account Assistant chapters

Complete all of the chapters to create a panel account for a basic control panel installation.



Edit accounts with the Account Assistant

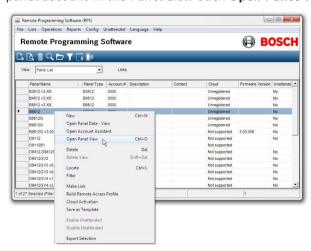
To edit a B Series control panel account with the Account Assistant, right-click on the account in the Panel List. Click Open Account Assistant.



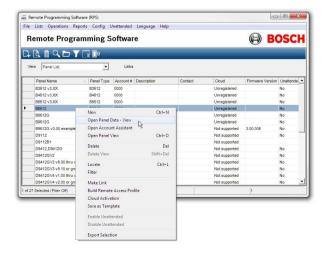
Switching to Panel View or Panel Data - View

The Account Assistant includes key parameters from both the Panel View and and Panel Data - View for a basic control panel installation. More complex control panel installations will require configuration of parameters not included in the Account Assistant.

To access all control panel parameters, first close the Account Assistant, then right-click the panel account in the Panel List. Click **Open Panel View**.



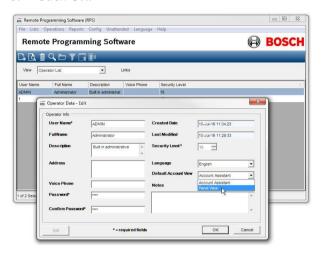
To access the panel data configuration for the panel account, first close the Account Assistant, then right-click the panel account in the Panel List. Click **Open Panel Data - View**.



Changing the default account view for operators

To change an operator's default account view for creating and editing new B Series control panel accounts from Account Assistant to Panel View:

- Select the Operator List.
- Right-click an operator to edit.
- 3. Click Edit.
- 4. From the Default Account View drop-down menu, select Panel View.
- 5. Click OK.



7 RPS upgrade, backup, and restore

Follow the instructions in this chapter to upgrade RPS, backup the RPS database, or restore the RPS database.

Required installation/upgrade SQL server roles and permissions

RPS requires specific SQL Server roles and permissions for successful installation or upgrades and for RPS use and operations.

RPS installation and database creation	SQL Server role(s) and permission(s)		
RPS installation and upgrade	– sysadmin role		
Create Database within an existing RPS installation	or - other SQL Server Role with Control server permission added		
Use and operation of an existing RPS installation	SQL Server Role(s) and Permission(s)		
Upgrade Database within an existing RPS installation	– db_owner		
Create, upgrade, delete Panel Accounts			
Using File>Backup or File>Restore within an existing RPS installation			

7.1 Upgrade RPS



Notice!

Backup the RPS database before upgrade

Before you begin the update process, make sure to back up your RPS database. You will also have the option to create a backup file at the first step of an RPS installation or upgrade. Refer to *Create a backup file*, page 16

For RPS v5.0 and earlier versions, follow these steps to upgrade to the latest version of RPS:

- 1. Backup the RPS database. Refer to RPS database backup and restore (manual process), page 40 for instructions.
- 2. Download the latest version of RPS. Refer to Download first, page 8 for instructions.
- 3. Begin the upgrade. Click **Yes** to exit the RPS installation and do the manual backup and uninstall steps. After successfully completing these steps, rerun the RPS installer to install RPS. Refer to *Install RPS*, page 9, Modify, repair, or remove RPS, page 43 and RPS database backup and restore (manual process), page 40.

To continue without upgrading:

Click No to continue the RPS Installation and upgrade RPS using the installed SQL version.



For RPS v6.0 and higher versions, refer to *Upgrade to SQL 2017*, page 37 for instructions.

RPSsvc user creation

During a new RPS installation or an RPS upgrade, a non-admin user (RPSsvc) is automatically created by the RPS installer with a reduced set of required permissions. The RPSsvc user is used by RPS to start/stop the RPSProxy and RPSService and perform Unattended operations when configured.

If the RPSsvc user creation fails during RPS installation or upgrade, the RPS installer will continue and use the local System account to start/stop the RPS services.

For higher security, it is recommended that a Windows user administrator create a Windows user account with limited permissions required to start/stop and operate the RPS services.

If you receive an RPS Service Logon as RPSsvc error during installation or upgrade, see Manually create a local user and assign to services, page 25 for instructions on how to manually create the Windows user with required permissions.

7.2 Upgrade to SQL 2017



Notice!

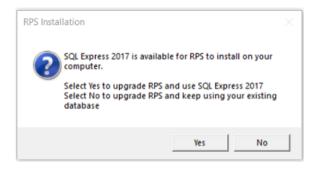
Windows 32 bit operating systems

Microsoft SQL 2017 is not compatible with 32 bit operating systems. If your Windows operating system is 32 bit, the RPS installation will automatically install Microsoft SQL 2012.

For RPS v6.0 and higher versions

RPS v6.11 enables the automatic upgrade of RPS and migration from SQL 2012 to SQL 2017 during the RPS upgrade process.

In the dialog window, click Yes to start the upgrade.



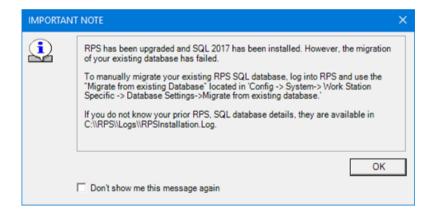
The automatic upgrade process:

- backs up the existing SQL 2012 RPS database
- installs SQL 2017
- upgrades RPS to the latest version
- restores the new SQL 2017 RPS database

When the upgrade finishes successfully, a database backup file is available in the RPS install directory named "RPS<Version> DDMMYYYY.XML

If the upgrade fails, view installation log file the for information. Refer to View the installation log file, page 24

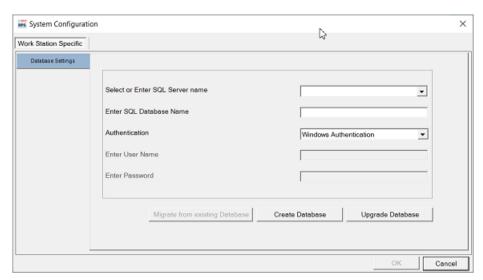
If an upgrade or migration failure message appears when starting RPS for the first time after upgrade, you can manually upgrade or migrate the database.



7.3 Migrate or Upgrade existing SQL database (RPS)

Within RPS, you can migrate or upgrade an existing RPS database to the current RPS installation. The process overwrites the current RPS installation and database with the data from the RPS database selected to migrate or upgrade.

In RPS, click Config > System to access the Work Station Specific > Database Settings screen.



Migrate from existing database



Notice!

Administrator permission required

The SQL user account requires appropriate administrator (admin) permissions for the SQL server when migrating from an existing database or upgrading the database.

The Migrate from existing Database option is used to overwrite an RPS installation and SQL database based on a different, active RPS installation and database configuration. Any RPS v6.0 or higher version can be migrated to an RPS operating with the same or higher Microsoft SQL version.

To migrate a previous version of an SQL database into RPS (v6.0 and higher):

- Click Migrate from existing Database.
- Select a SQL server from the list or type the SQL server name in Select or Enter SQL **Server name**. The local instance of the SQL server is the default entry.
- 3. Type the name of the selected SQL database in **Enter Database Name**.
- 4. Select the type of authentication that is used for the SQL database in **Authentication**. Windows Authentication is the default.
- For SQL Server Authentication, enter the username and password.
- Select Encrypted if you are pasting the RPS encrypted password from the RPS log file or other location.
- Click Migrate.

A message shows when the migration has successfully completed.

Upgrade database

The Upgrade database option will upgrade the selected SQL database to support the version of RPS that is actively open and attempting to connect.

To upgrade the database:

- 1. Click Upgrade Database.
- 2. Select a SQL server from the list or type the SQL server name in **Select or Enter SQL Server name**. The local instance of the SQL server is the default entry.
- Type the name of the selected SQL database in **Enter Database Name**.
- 4. Select the type of authentication that is used for the SQL database in **Authentication**. Windows Authentication is the default.
- For SQL Server Authentication, enter the username and password.

- Select Encrypted if you are pasting the RPS encrypted password from the RPS log file or other location.
- 5. Click Upgrade.
- 6. For SQL Express 2012 to SQL Express 2017 database upgrades:
- 7. Optionally create a database backup (.bak).
- 8. Confirm that you want to create a backup file.

A message shows when the upgrade has successfully completed.

7.4 RPS database backup and restore (manual process)

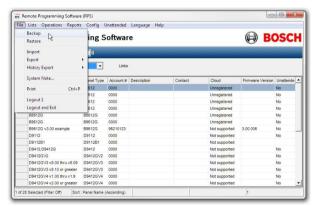
You should periodically backup your RPS database to reduce the risk of lost data due to equipment failure or data corruption.

You should backup your RPS database before upgrading to a newer version. You can automatically create a backup file during the RPS installation.

Manual backup

To back up the RPS database:

- 1. Click **File** to open the File menu.
- 2. From the File menu, click Backup.



3. Choose (or create) a folder and enter a file name for the backup file.



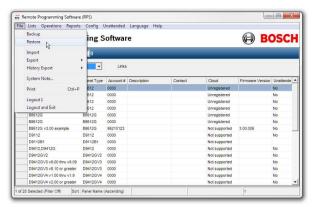
4. Click **Save** to finish the backup.



Restore

To restore an RPS database backup file:

- 1. Click File to open the File menu.
- 2. From the File menu, click Restore.



Choose the RPS database backup file to restore from. Click Open.



Review the warning. Enter Y and click OK to confirm that you want to overwrite the current RPS database with the data in the backup file.



The restore process is complete. RPS will now use the restored database. 5.



Refer to

Create a backup file, page 16

Maintenance



Notice!

After system installation and any control panel programming, perform a complete system test. A complete system test includes testing the control panel, all devices, and communication destinations for proper operation.

8.1 Set security levels by panel type for networked users

If your company is using a database on a networked drive and you want to allow users to be able to set security levels for control panels, you must copy the control panel definition files to each workstation on the network. This preserves the security settings you have set for each control panel type on the individual workstations on the network.



Notice!

If these files are not copied to each workstation, users on other workstations can change data for control panel types that you restricted.

Transferring your security settings to other computers on the network:

 From RPS, set the security levels for each control panel type on any one computer on the network. Only users with an authority level of 15 can perform this operation.
 In RPS, refer to the RPS General Help for more information on setting security levels in RPS.



Notice!

Setting the security levels for a control panel type, sets the levels for all accounts for that control panel type (new and existing).

- Use Windows Explorer to copy the appropriate control panel definition files (peg defs)
 to each computer on the network after you set the security level for each field in each
 panel type. To do this, open the RPS directory on the computer where you are currently
 working. Find the folder labeled **PegDefs**.
- 3. Use Windows Explorer to copy the PegDefs folder to each of the RPS directories on all workstations running RPS. Use the drag-and-drop feature in Windows to move the PegDefs folder to each computer on the network. Click and hold the PegDefs folder with the right mouse button and drag the folder to the RPS directory on the target workstation computer. Release the right mouse button. A dialog box opens and prompts if you want to Move, Copy, Create a Shortcut to the folder or Cancel.



Notice!

Make sure that you select **Copy**. Selecting **Move** moves the entire PegDefs folder from the current computer to the workstation computer. Click **Yes** if the **File Already Exists - Do you want to overwrite?** message shows.



Notice!

Moving the PegDefs folder prevents RPS from working on the current computer. If you accidentally move the PegDefs folder, return it to the RPS directory on the computer, and then recopy it to the workstation.

4. After Windows finishes the copy process, the workstation has the same security settings as the original computer. Repeat Step 3 for each workstation on the network.



Notice!

If you change the control panel security setting in the future, you must copy the new PegDefs files to each workstation again.

8.2 Modify, repair, or remove RPS

Modify RPS



Notice!

To modify the current RPS installation, you must use the original installation files. If RPS was installed from the CD/DVD-ROM, you must use the CD/DVD-ROM.

If RPS was installed from a folder containing the installation files, you must use the same folder in the location it resided when RPS was installed.

To add features, Unattended Operation for example, or remove installed features:

- 1. Open the Windows Add/Remove Programs dialog box.
- 2. Scroll to RPS and click it.
- 3. Click Change. The RPS Setup Maintenance dialog box opens.



4. Click **Modify**, and then click **Next**. The Select Features dialog box opens.



- 5. Select the check boxes for the features you want to install, or clear the check boxes for the features you want to remove.
- 6. Click **Next**. The selected features are either installed or uninstalled as selected.

7. When the Install Complete dialog box opens, click **Finish** to end the RPS Setup Maintenance process.

Repair RPS



Notice!

To repair the current RPS installation, you must use the original installation files. If RPS was installed from the CD/DVD-ROM, you must use the CD/DVD-ROM.

If RPS was installed from a folder containing the installation files, you must use the same folder in the location it resided at when RPS was installed.

Reinstalling all of the program features installed during the previous setup:

- Select Start > Settings > Control Panel > Add/Remove Programs. The Add/Remove Programs dialog box opens.
- Scroll down in the list until you see RPS. Click RPS to select it. 2.
- 3. Click **Change/Remove**. The RPS Setup Maintenance dialog box opens.
- Click Repair, and then click Next. A progress indicator dialog box opens. When the repair is complete, the Install Complete dialog box opens.
- 5. Click Finish to end the RPS Setup Maintenance process.

Remove RPS



Notice!

Only remove RPS if you do not intend on using RPS in the future.

If you are using an unreleased version of RPS, such as an alpha or beta version, you must uninstall (remove) RPS before installing a released version.

Removing RPS and all of its features:

- Select Start > Settings > Control Panel > Add/Remove Programs. The Add/Remove Programs dialog box opens.
- Scroll down in the list until you see RPS. Click RPS to select it. 2
- 3. Click Change/Remove. The RPS Setup Maintenance dialog box opens.
- 4. Click Remove, and then click Next.
- 5. When the Confirm Uninstall dialog opens, click Yes. A progress dialog box opens.
- When the removal process is complete, restart the computer.

8.3 Switch from a client to a network installation

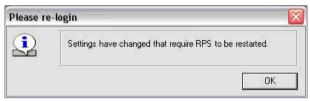
It can be advantageous to place your RPS database files on a network drive so that many workstations can access a single database.

Placing RPS database files on a network drive:

- Start RPS, and log on when the RPS Logon Information dialog box opens.
- Select Config > System. The System Configuration dialog box opens with the Work 2 Station Specific tab open and Database Settings highlighted.
- 3. In the Select or Enter SQL Server name field, select the name of the network SQL Server.
- 4. If the SQL Server database already exists, enter the SQL Server Name, SQL Database Name, User Name, and Password, then click OK. If the SQL Server database does not already exist, enter the SQL Server Name and the desired SQL Database Name, User Name and Password for the database, then click Create Database. The Database Created Successfully dialog box opens.



Click OK. The Please re-login dialog box opens.



Click **OK** to restart RPS.

When the database is shared on a network drive, two or more operators can access a single account. When an operator attempts to access an account that is already open by another operator (for example, one that has a different user name), a Panel Already Open dialog box appears, indicating that the account is already opened for editing by another operator (the operator's log-in name shows in the message box). The operator opening a second instance of the database can view the contents of the account, but cannot edit any of the information in the account.



If an operator logs on to two different terminals with the same user name and accesses the same account from both terminals, RPS prompts the operator at the second terminal to either override the lock and allow edits, or open the account in View Only mode. Do not log on to RPS using the same user name on multiple computers.

9

Appendix

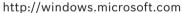
9.1 RPS minimum system requirements

System requirements					
Operating System	Windows 10, 11 Windows Server 2012 R2, 2016, 2019, 2022				
SQL Express	2012 SP2, 2014, 2016, 2017 2012 SP2 with Hotfix patch KB3205054 installed for 32-bit systems 2017 14.0.1000.169 installed for 64-bit systems				
Processor type	x64 Processor: AMD Opteron, AMD Athlon 64, Intel Xeon with Intel EM64T support, Intel Pentium IV with EM64T support x86 Processor: Pentium III-compatible processor or faster				
Processor speed	Minimum: x86 Processor: 1.0 GHz x64 Processor: 1.4 GHz Recommended: 2.0 GHz or faster				
RAM	Minimum: 4 GB Recommended: 8 GB (increase as database size increases for optimal performance)				
Hard disk	Available space: x86 Processor: 16 GB x64 Processor: 20 GB				
Monitor	Minimum resolution: 1024 x 728				



Notice!

These minimum system requirements are based on installing RPS or RPS-LITE with SQL Express on the same computer. For any other configurations of OS and SQL, reference specific requirements on Microsoft's website:





Notice!

Required SSL and TLS versions for Cloud connection

To connect RPS to a control panel remotely using Cloud (Remote Connect), SSL version 3.0 and TLS version 1.2 must enabled on the computer running RPS.

Notice!



Microsoft Operating System Support End

As of Jan 10, 2023, PCs running Windows 8.1 will still function, but Microsoft will no longer provide technical support for any issue, software updates, or security updates or fixes. As of January 14, 2020, Microsoft stopped supporting Windows 7. As of July 13, 2010, Microsoft stopped supporting Windows 2000. As of April 8, 2014, Microsoft stopped supporting Windows XP. As a result, Bosch Security Systems, Inc. no longer supports the operation of RPS 5.13 or later on Windows 7, Windows 2000 or Windows XP operating systems.

9.2 Network drive installation

- If you copy the contents of the RPS CD/DVD-ROM to a networked drive, the drive must be mapped to a drive letter in order for RPS to properly install on local computers connected to the networked drive.
- RPS cannot install from a networked drive that uses the Universal Naming Convention
- If you copy the contents of the RPS CD/DVD-ROM to a local or network drive, you must change the Read/Write permission on the License folder.

9.3 **Automatic RPS installation**

9.3.1 Overview

When installing or upgrading to version 5.12 or later, RPS creates a file called RPSInstallation.ini. This file contains the SQL database settings that are selected when installing or upgrading RPS.

After the first installation or upgrade of RPS, you can run the RPSInstallation.ini file to complete subsequent installations or upgrades that are identical to the first installation or upgrade.

9.3.2 Generate the RPSInstallation.ini file

To generate the RPSInstallation.ini file, you must install or upgrade to version 5.12 or later. During the installation or upgrade process, RPS collects the selected settings for the SQL database and saves them to X:\RPSInstallation.ini ("X" = the drive letter assigned to the computer's local drive).

The RPSInstallation.ini file contains these settings:

- SQLExpressInstanceName: name of the selected SQL Express instance name.
- RPSDatabaseName: name of the selected RPS database.
- UserName: user name required for SQL authentication. By default, RPS uses Windows authentication. This setting is not required for Windows authentication.
- Password: password required for SQL authentication. By default, RPS uses Windows authentication. This entry is not required for Windows authentication. This entry is encrypted.



9.3.3 Use the RPSInstallation.ini file

Using the RPSInstallation.ini file to install RPS with the same SQL database settings as the first installation:

- Copy the following files to a blank CD-ROM:
 - All files from the master RPS CD-ROM
 - The RPSInstallation.ini file from the computer where the first installation or upgrade was performed (X:\RPSInstallation.ini, where "X" = the drive letter assigned to the computer's local drive).
 - All of the required installation files, including the RPSInstaller.exe file, reside in the fscommand folder at the root level of the RPS CD-ROM. The RPSInstallation.ini file must reside in this folder as well.
- 2. Insert the copied RPS CD-ROM into the next computer that requires an installation or upgrade of RPS.
 - RPS installs the SQL database according to the settings in the RPSInstallation.ini file, and then installs RPS. When the installation process is complete, RPS connects to the
- 3. Repeat Step 2 for all remaining computers that require an RPS installation or upgrade.

9.3.4 Customize the RPSInstallation.ini file

If the RPS installation requires that the SQL database is installed locally on each computer (not shared), you can customize the RPSInstallation.ini file.

To customize the RPSInstallation.ini file:

- Create a text file (.txt) in a text editor such as Notepad.
- Copy the following lines in the order as shown below:
 - [Installation]
 - NewSQLInstance=
 - NewRPSDatabase=
- Save the file.

Use RPSInstallation for the filename. Change the file extension from .txt to .ini.

- Close the file.
- Copy the custom .ini file along with all of the files on the master RPS CD-ROM to a blank CD-ROM.
 - All of the required installation files, including the RPSInstaller.exe file, reside in the fscommand folder at the root level of the RPS CD-ROM. The RPSInstallation.ini file must reside in this folder as well.
- Install RPS onto each computer that requires an installation or upgrade.

RPS creates unique SQL instance names and RPS database names on each computer.

9.4 Support information



Access our **support services** at <u>www.boschsecurity.com/xc/en/support/</u>.

Bosch Security and Safety Systems offers support in these areas:

- Apps & Tools
- Building Information Modeling
- Warranty
- Troubleshooting
- Repair & Exchange
- Product Security

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Visit the Bosch Building Technologies Academy website and have access to **training courses**, **video tutorials** and **documents**: www.boschsecurity.com/xc/en/support/training/

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