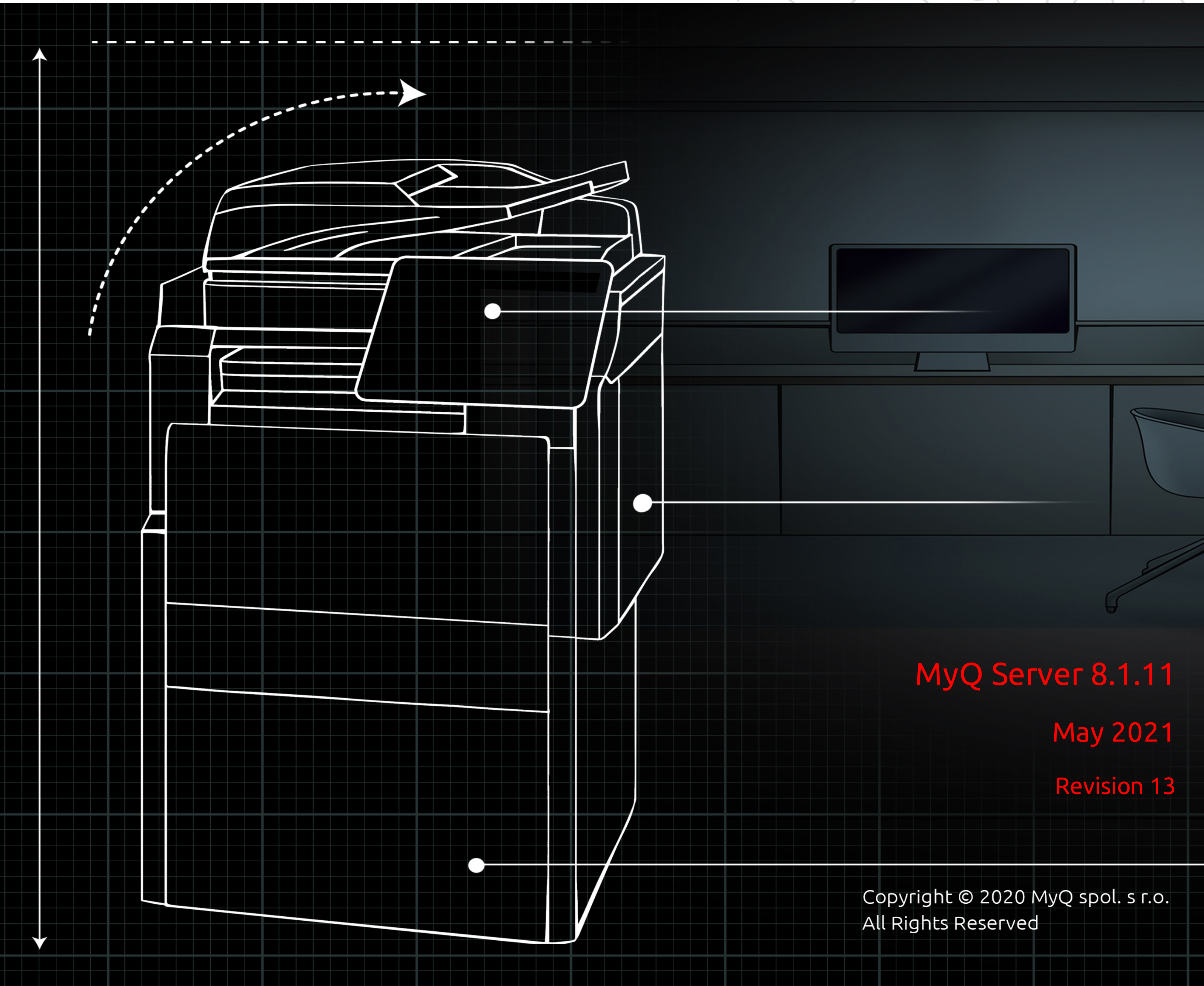
MyQ Basic Installation Guide



MyQ Server 8.1.11

May 2021

Revision 13

Table Of Contents

1. About this document

This document provides administrators with the information to install, configure, upgrade and uninstall the MyQ® print server. Furthermore, it describes the management options of the MyQ printing solution.

Typographical conventions

- Menu names, fields, tabs and other elements in a view are displayed **bold**.
- Field input is displayed *italic*.

Alerts

- **Info**: the info box provides extra information about a feature, function, task or procedure.
- **Notice**: the notice box holds information with a higher urgency than the Info box.

Structure of the document

The chapters in the first part of the guide lead the administrator through the installation and setup of the MyQ print server and introduce the interfaces of the MyQ management; the chapters in the middle part of the guide show how to manage the main areas of the MyQ operation, and the last chapter describes the update and uninstallation of the server.

1.1. Audience

To work with this manual, the reader should ideally be experienced in dealing with their company's devices and terminals, and have a system administration background.

1.2. Change History

Place in the document	Change
"Policies" on page 130	New print job policy options
"User detection method" on page 187	Queue settings *Get job name, Username and Computer name from PJL* improved. It is now possible to specify multiple PJL parameters
"Smart Job Manager" on page 182	Spooling a job via SJM uses **unauthenticated user* as a temporary user instead of the client system user
"Generating PIN" on page 117	Improved PIN management
"Quota" on page 374	Quota assignment and monitoring improvements

Place in the document	Change
"The administrator can view the Event History in MyQ, Event History:" on page 103	*Alert History* changed to *Event History*
"MyQ Easy Config" on page 14	MyQ Easy Config application improvements
"Main database encryption and backup and restore " on page 20	New password confirmation field before backup
"Licenses" on page 64	License information updated
"Quota" on page 374	*Day* time period added in Quota
"Applying changes of the MyQ server" on page 62	New job processing options
"Watermarks" on page 199	Watermark improvements
"Reports " on page 287	*Device events summary* report no longer available. New report available, called *Event History*.
"Queues " on page 173	*Follow me* queue renamed to *Pull Print* queue
"MyQ system requirements" on page 4	System Requirements table updated
"External Systems" on page 395	Added *External Systems* information
"Jobs Preview" on page 273	Added MAKO as MyQ's default engine for jobs preview
"IPPS via Chromebook" on page 212	Added IPPS printing via Chromebook
	Updated SJM and SPS supported versions
	Scan to MyQ Users renamed to *Scan to Me*
"MyQ system requirements" on page 4	Easy Cluster now available on a separate installation package
"VMHA License" on page 71	VMHA license information added
"Job privacy" on page 248	Job Privacy feature added

2. Basic Information

2.1. About MyQ®

MyQ® is a universal printing solution that provides a variety of services related to printing, copying and scanning. All functions are integrated into a single unified system, centrally managed by the administrator on the MyQ server.

The main areas of operation of the MyQ solution are monitoring, reporting and administration of MyQ users, printing devices, and print, copy and scan jobs. MyQ also enables extended access to the services via the MyQ Web Interface or the MyQ Mobile application and simplified operation of printing devices via MyQ Embedded terminals.

INFO: Information about the MyQ Embedded terminals can be found in MyQ terminal manuals of the particular printing devices brands; information about the MyQ Mobile Printing application can be found in the *MyQ Mobile Printing Application User Guide*.

2.2. MyQ system requirements

The following sections detail the MyQ system requirements for configuration, its components and main communication ports.

2.2.1. Configuration

<table>
<tr><td>Server/PC:*</td><td>

4 GB RAM and 4 CPU cores for a server with low system load
8 GB RAM and 8 CPU cores in any of the following cases:

More than 400 printers
Activated Job Parser
Activated Job Archiving
High number of Office document printed via email/web/mobile
Use of Smart Job Manager
Use of Smart Print Services
Watermarks used in queues
Heavy usage of the MyQ API

3 GB disk plus additional storage for print/scan jobs, logs, history, backups. The recommended size of the disk is at least 100 GB.

A dedicated disk for the MyQ installation is recommended, with at least 100 IOPS
+10 IOPS should be calculated per user session at the same time

For systems with a large number of direct queues, we strongly recommend using SSD.
</td></tr>
<tr><td>MyQ Smart Job Manager

MyQ Smart Print Services</td><td>Supported versions: MyQ Smart Job Manager version 8.1 or higher, Smart Print Services version 8.1 or higher

Requirements: If there are more than 100 client computers using the MyQ Smart Job Manager and/or the MyQ Smart Print Services, the MyQ server requires 2+ CPU cores just for the SJM and/or the SPS operations.</td></tr>
</table>

Suggested No. of users and groups:	**Users:** up to **100,000 (30,000 - 60,000 per one synchronizing line)** . Depends on the length and number of fields for synchronization. **Groups:** up to **40 000** / **10** tree levels (group in group in group). Each **user** can be in up to **50** groups.
Storage space:	**Application files:** 300 MB **Log:** 100MB (14 days) **Accounting records:** 6GB (4-year history) **Print jobs:** Depends on the volume of print. The size of the MyQ database depends on the size and complexity of your printing environment (number of users, printing devices, sent print jobs etc.). During an upgrade of the MyQ system, the actual size of the MyQ installation on the server (including the MyQ database) may temporarily grow up to four times.
Operating system:	• Windows Server 2012 / 2012 R2/ 2016 / 2019, with all the latest updates (64 bit) • Windows 8.1 / 10, with all the latest updates, only 64 bit OS is supported. Be aware of the connection limit of up to 20 clients. • Microsoft .NET Framework 4.7.2 or higher
Web browser:	• Google Chrome 63 or higher (Recommended) • Mozilla Firefox 57 or higher (Recommended) • Internet Explorer 11 or higher (Recommended using Microsoft Edge) • Microsoft Edge 14 or higher • Safari 10 or higher Older browser versions will not function as required.

INFO: The values of the minimal necessary configuration may increase in an environment with a high system load. To ensure that the system runs smoothly, monitor the server's performance during peak usage hours and adjust the settings accordingly.

INFO: MyQ should not be installed on a Domain Controller.

INFO: For trouble-free running of the machine we strongly recommend using a server operating system.

NOTICE: To make sure that the MyQ system runs smoothly, you need to set an exception for MyQ in your anti-virus setup.

2.2.2. Installed parts and possible conflicts

The installation file contains, besides the MyQ system itself, installations of Firebird database server, Apache web server, PHP runtime and Kyocera provider. With the Scan Management function activated, the MyQ system uses its own SMTP server.

If there are other systems that run on the same server and use a database, a web interface, PHP, or an email server, there is a risk of system conflicts. The conflicts can cause malfunctions on one or more of the systems. Therefore, we recommend you to install MyQ on a server with a clean OS installation.

MyQ fully supports installation on virtual servers.

2.2.3. MyQ main communication ports

The following communication ports are used by MyQ and therefore have to be left unallocated and unoccupied in the Firewall:

Incoming ports

TCP Port 25	Used by the SMTP protocol for Scan Management, receiving email notifications from printers, and eventually for receiving emails with jobs (see *"Forwarding emails to the MyQ SMTP server"* on page 225)
TCP Port 515	Used by the LPR protocol for print job transmission to the MyQ server
TCP Port 3050	Used for communication with the Firebird database server
TCP Port 8090	Used by the HTTPS protocol for accessing the MyQ web interface, communication with Embedded terminals and job roaming between MyQ servers
TCP Port 8082	Used for communication with internal components (not opened in firewall) **NOTICE:** You can change this port in **Change port** in the installation folder /Server/platform.ini and then set the same port in the config.ini.
UDP Port 161	Used by the SNMP protocol for communication with printing devices
UDP Port 11108	Used for communication with terminals. When you use the Terminal Manager, this port is sometimes TCP 11108.
UDP Port 11112	Used for communication with LPM
ICMP Port Protocol	Used for the PING command

TCP Port 389	Incoming port used for the MyQ LDAP server
TCP Port 636	Incoming port used for the MyQ LDAPS server
TCP Port 443	Used by the IPPS protocol for print job transmission from MyQ to printing devices
TCP Port 515	Incoming port used by the LPR protocol for print job transmission from MyQ to printing devices
TCP Ports 21, 49152 - 65535	Incoming port used for MyQ FTP server (sending scans to MyQ server from Embedded terminals)
TCP Port 8631	Incoming port used for job spooling via the IPPS protocol
TCP Port 8632	Incoming port used for job spooling via the AirPrint/MOPRIA protocol
Incoming/outgoing ports needed for Kyocera provider features i/o = incoming and outgoing, no addition means 'only incoming'.	
TCP Ports 9090-9091 i/o	TCP ports **9090** and **9091** are necessary for the remote setup of Kyocera embedded terminals

TCP Ports 9093-9099	TCP port **9093** is used for authentication and authorization. TCP Port **9094** is used for driver access, mobile access and cannot be changed! **i/o** TCP port **9095** is used for Spooler service. **i/o** TCP port **9097** is used for Log information event. **i/o** TCP port **9098** is used for Job status event. **i/o** TCP port **9099** is used for Thrift access.
TCP Port 9101 - i/o	Used by the User session service
TCP Port 631	Used for Mobile print via IPP
TCP Port 717	Used for Mobile print via IPPS
Incoming / outgoing ports default	
TCP Port 9100	Used by the Raw protocol for print job transmission from MyQ to printing devices and vice versa.

Outgoing ports default

TCP Port 25/467/587	Used by the SMTP protocol for sending outgoing emails from MyQ. The port depends on the SMTP server.
TCP Port 80	License activation server. The IP address of the MyQ license server is 217.11.225.212 (license.myq.cz), running on the standard http port 80

TCP Port 110	POP3
TCP Port 143	IMAP
TCP Port 161	Used by the SNMP protocol for communication with printing devices. The answer from the printer is returned on a dynamic port
TCP Port 389	LDAP Server
TCP Port 443	Used by the IPPS protocol for print job transmission from MyQ to printing devices
TCP Port 631	Used by the IPP protocol for print job transmission from MyQ to printing devices
TCP Port 636	LDAPS Server
TCP Port 993	IMAPS
TCP Port 7627	Used during the remote setup of the HP embedded terminal. Can be closed after the remote setup, but this is not recommended.
TCP Port 10040	MyQ Printing Protocol (Secured) - MPP(S)
TCP Port 9100	Used by the Raw protocol for print job transmission from MyQ to printing devices.
TCP Port 11108	Communication between Terminal Manager/MyQ and Terminals
TCP Port 11112	MyQ sending data to Smart Job Manager

INFO: Some of the above mentioned ports can be changed in case of conflicts with other applications. Such conflicts are shown via the ***Windows socket error 10048*** error message.

MyQ and Easy Cluster

Since MyQ Print Server 8.1.5+, Easy Cluster has been removed from the installation package. It is now offered as a separate package, available for download in the MyQ Community portal. Be aware that an old version of the 1.0.2t OpenSSL library with the Raccoon Attack vulnerability is included in that package.

For further information, check the *MyQ Easy Cluster* guide.

2.3. Licenses

An Enterprise or Ultimate license is required. You can purchase the license with rights to a certain number of printers. For information on how to add licenses see *"Licenses"* on page 64.

NOTICE: For information about the differences between the two types of licenses, see *http://myq-solution.com/products*.

NOTICE: Check the *MyQ Licensing Quick Guide* for further details on the latest MyQ licensing model.

3. Installation

This chapter shows you how to install the MyQ print management system. Prior to the installation, make sure that Microsoft .NET Framework 4.7.2 (Full version) is already installed on your computer. If not, install it using the steps in the following section.

> **NOTICE:** Before the installation on Windows Server 2012/2012 R2/2016/2019 (or on Windows 8.1/10), make sure that all the latest Windows updates are downloaded and installed.

Installing Microsoft .NET Framework 4.7.2 (Full version)

1. Download the Microsoft .NET Framework 4.7.2 (Full version) installation file: (https://support.microsoft.com/en-us/help/4054531/microsoft-net-framework-4-7-2-web-installer-for-windows)
2. Open the downloaded executable file.
3. Follow the directions of the installation wizard.

Installing MyQ®

1. Download the latest available version of MyQ from the MyQ Community portal.
2. Run the executable file. The **Select Setup Language** dialog box appears.
3. Select your language and click **OK**. The **License Agreement** dialog box appears.
4. Select *I accept the agreement* and click **Next**. The **Select Destination Location** dialog box appears.
5. Select the folder where you wish to install MyQ. The default path is:

   C:\Program Files\MyQ\ or C:\Program Files (x86)\MyQ.
6. Click **Install**. MyQ is installed on the server.

7. Click **Finish**. Depending on the OS settings on the server, you might be asked to restart the computer.

    - If you are asked to restart the computer, you need to do so in order to finish the installation. After the restart, the MyQ Easy Config application opens and the MyQ database is upgraded.
    - If not, you can select to directly run the MyQ Easy Config application by keeping the **Run MyQ Easy Config** option selected.

4. MyQ Easy Config

This topic introduces the MyQ Easy Config application and briefly describes its main features. Furthermore, it guides you through the following basic procedures:

- how to manage MyQ services
- how to change MyQ passwords
- how to relocate you Data and Jobs folders
- how to encrypt, back up and restore your MyQ database
- how to change MyQ Web server ports
- how to clean up your Cache and Temp folders

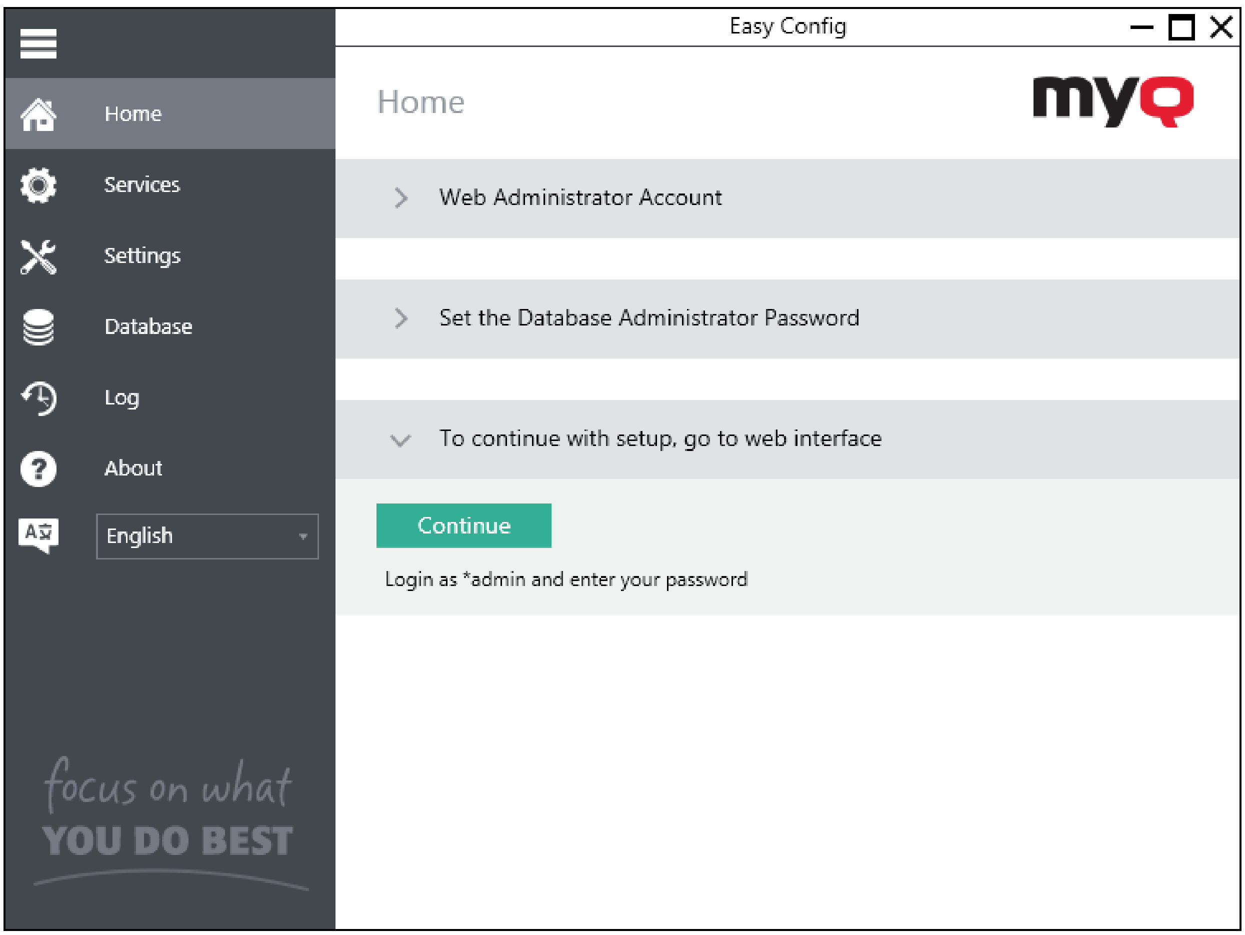


FIGURE 3.1. The initial tab of the MyQ Easy Config

4.1. Introduction

The MyQ Easy Config application is the basic environment for the setup of essential parts of the MyQ server, such as the MyQ database .

It automatically opens if you keep the **Run MyQ® Easy Config** option selected during the installation of the server. Otherwise, you can find it on the **Apps** screen in Windows 8.1+, Windows Server 2012 and newer.

After you open the application, you see its menu on the left side. From this menu, you can access the following settings:

- On the **Home** tab, you can quickly change the default passwords of the Web Administrator account and the Database Administrator account. You can also be redirected to the **MyQ Web User Interface**.
- On the **Services** tab, you can view and control the MyQ services.
- On the **Settings** tab, you can modify the MyQ Services, Web administrator, and Database Administrator accounts, change file paths of the MyQ system data and jobs files, change the port configuration of the MyQ server and clean up your **Cache** and **Temp** folders.
- On the **Database** tab, you can view information about the Main and Log Databases, as well as encrypt/decrypt, backup, and restore your database.
- On the **Log** tab, you can overview all the operations executed by the MyQ system.
- On the **About** tab, you can see the information regarding the current version of MyQ.
- Lastly, you can select the MyQ Easy Config display language from the drop-down list.

4.2. Managing the MyQ Server services

On the **Services** tab you can stop, start and restart the services of the MyQ server.

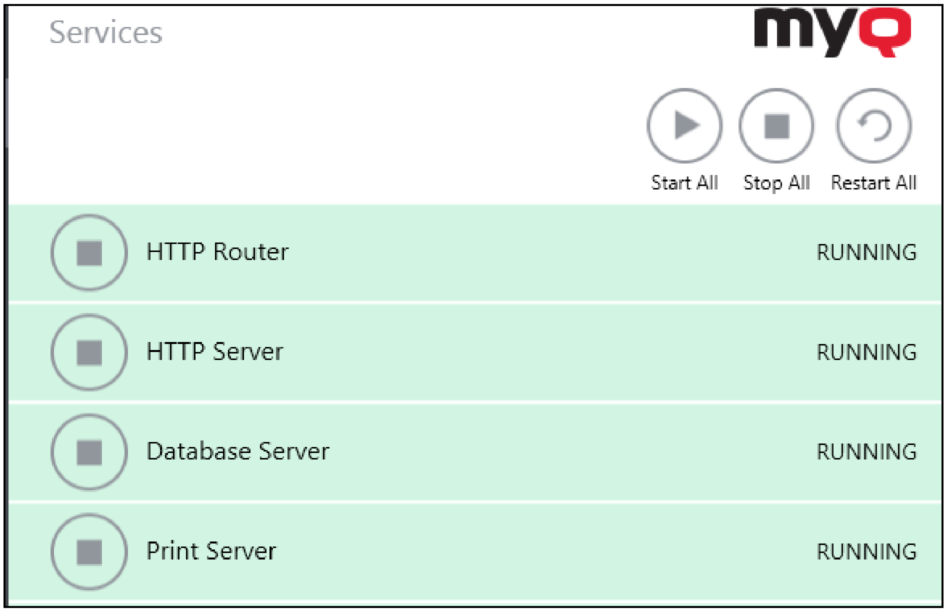


FIGURE 3.2. MyQ Server services

4.3. Passwords

On the **Home** tab and on the **Settings** tab of the MyQ Easy Config, you can change the default passwords for login to the MyQ Web Interface and for access to the MyQ database.

- The user name for accessing the MyQ Web Interface is **admin* and the default password is *1234*.
- The user name for accessing the MyQ database is *SYSDBA* and the default password is *masterkey*.

> **NOTICE:** We strongly recommend you to change both passwords immediately after the installation.

4.3.1. Changing passwords on the Home tab

The first time you open the application, on the **Home** tab, you can see the **Web Administrator Account** and the **Set the database administrator password** widgets. To change the passwords there, enter the new password in the two password fields and click **Change**.

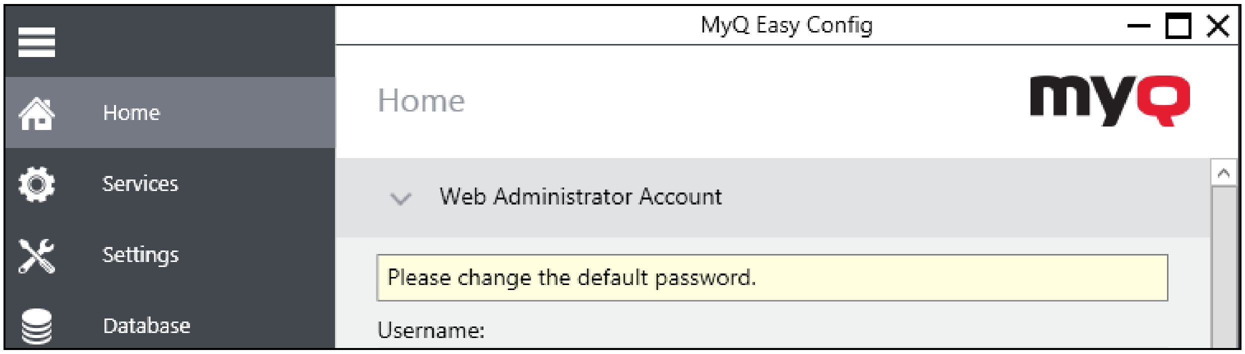


FIGURE 3.3. The Home tab of the MyQ Easy Config

4.3.2. Changing passwords on the Settings tab

After you replace a default password, its widget disappears from the **Home** tab and it cannot be set there anymore.

From that point on, it can be changed on the **Settings** tab of the MyQ Easy Config. To change the password there, enter the new password in the two password fields, and click **Change**.

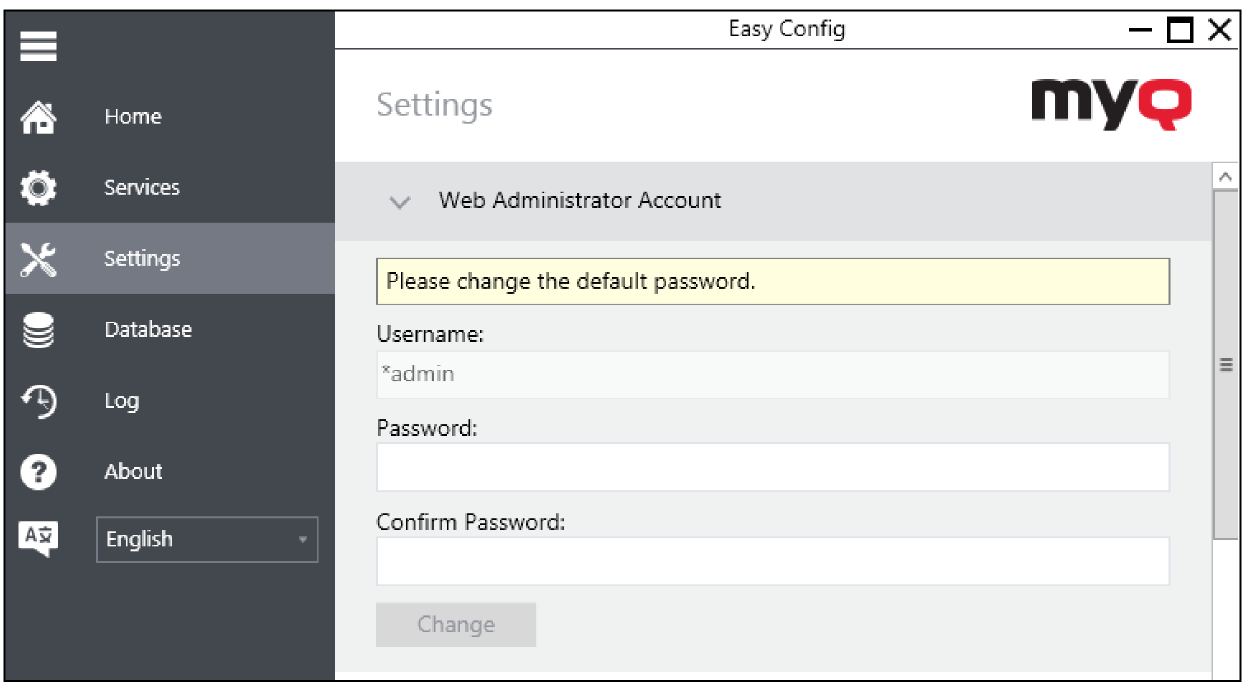


FIGURE 3.4. Password settings on the MyQ Easy Config **Settings** tab

Changing the MyQ Services Windows Account

MyQ Services run, by default, under the *Local System account*, meaning the account that was used during the installation.

This can be changed in the **Settings** tab, in the MyQ Services Windows Account section:

- Under Log on MyQ services as, select **Custom account**.
- Click on **Browse** next to the **Account** field, select the user account to be used for MyQ services and click **OK**. (The selected user should already have the rights to be able to log on as a service.)
- Type the account's password and then confirm it in the next field.
- Click **Change**. MyQ Services will be stopped and restarted.

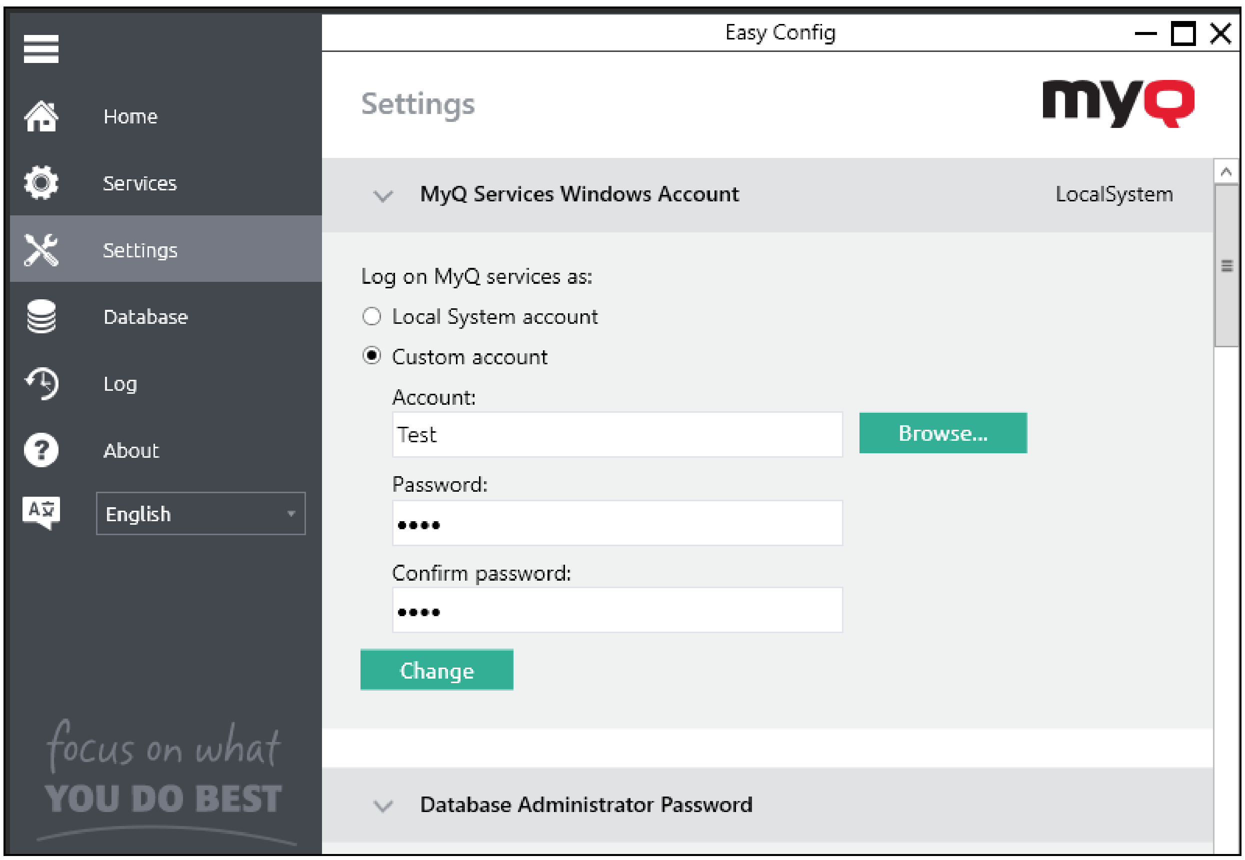


FIGURE 3.5. Changing MyQ Services account in MyQ Easy Config

- To change back to the default account, select **Local System account** and click **Change**. MyQ Services will be stopped and restarted.

4.4. Relocating the data folder and the jobs folder

On the **Settings** tab, you can see the locations of the MyQ data folder and the MyQ Jobs folder. The default folder paths are *C:\ProgramData\MyQ* for the data folder and *C:\ProgramData\MyQ\Jobs* for the jobs. Under normal circumstances, there is no need to change these folders locations. In case you have to do it, for example when there is not enough space on the system disk, follow the instructions below.

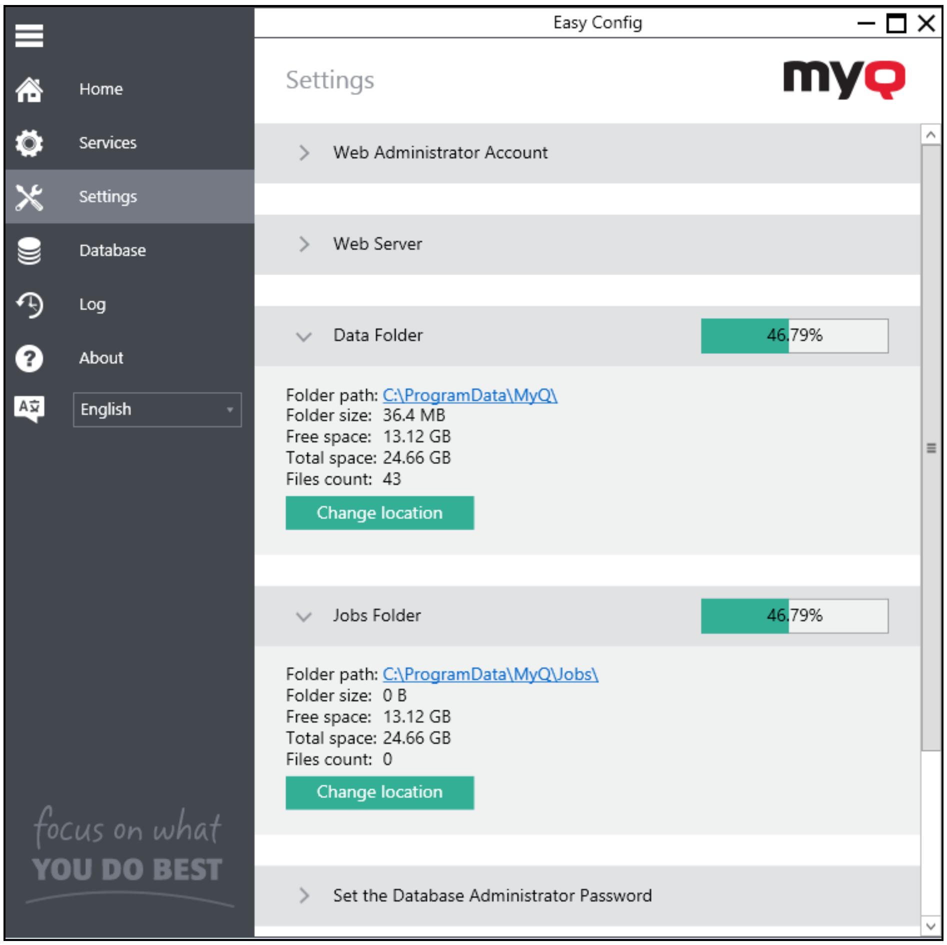


FIGURE 3.6. **Data Folder** and **Jobs Folder** location on the **Settings** tab

The **Data Folder** contains the MyQ database and additional files with data used by the MyQ system, such as reports, certificates or the config.ini file.

To change the MyQ Data Folder or the MyQ Jobs Folder location:

1. On the **Settings** tab, in the respective section, click **Change location**. The **Change folder location** dialog box appears.

2. In the dialog box, under **New folder**, enter the path to the new folder or click **Select** and find the folder location.

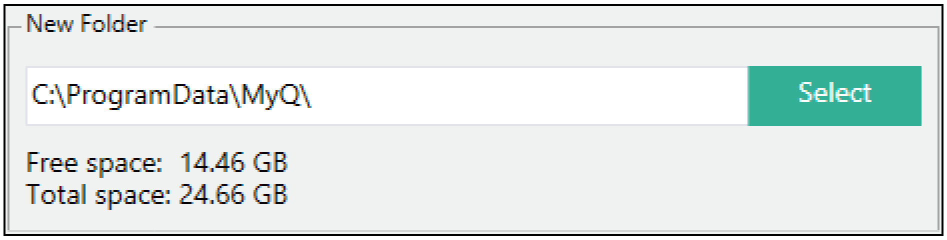


FIGURE 3.7. New folder location

3. Under **Change Operation**, select the required method of relocation of the existing data, and then click **Change location**. The folder is moved to the new location.

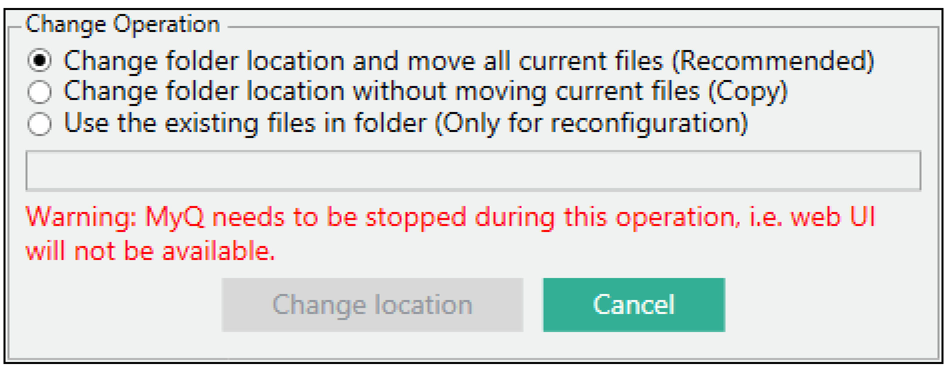


FIGURE 3.8. Selecting the method of relocation

NOTICE: The new folder has to be empty and should not contain system directories.

4.5. Main database encryption and backup and restore

On the **Database** tab, you can check the status of the MyQ Main database and the Log database and perform backup and recovery of the MyQ data. You can also see information about the current database version, available updates and a warning in case there is a need for an upgrade.

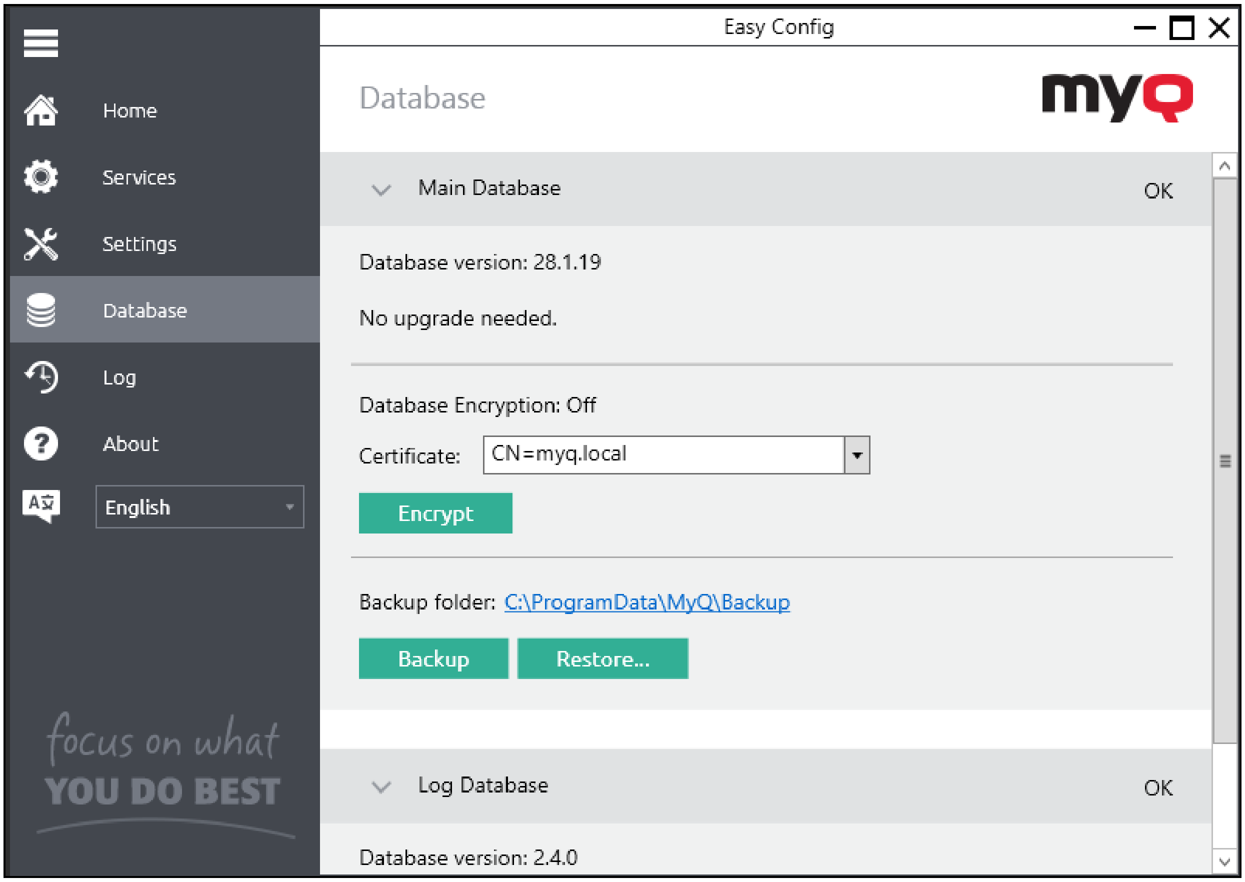


FIGURE 3.9. The **Database** tab of MyQ Easy Config

When you back up the data , MyQ creates a zip file with the following parts:

- The *database_*.zip* file contains the MyQ database and additional files with data used by the MyQ system, such as reports, certificates or the config.ini file.

4.5.1. Backing up MyQ data

To back up your MyQ data:

1. Open the **Database** tab.
2. In the **Main Database** section, click **Backup**.

3. Provide and confirm a password to protect the backup. If skipped, the backup will be created unprotected.

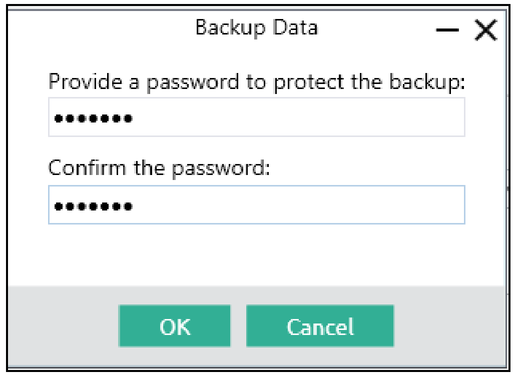


FIGURE 3.10. Backup Password prompt

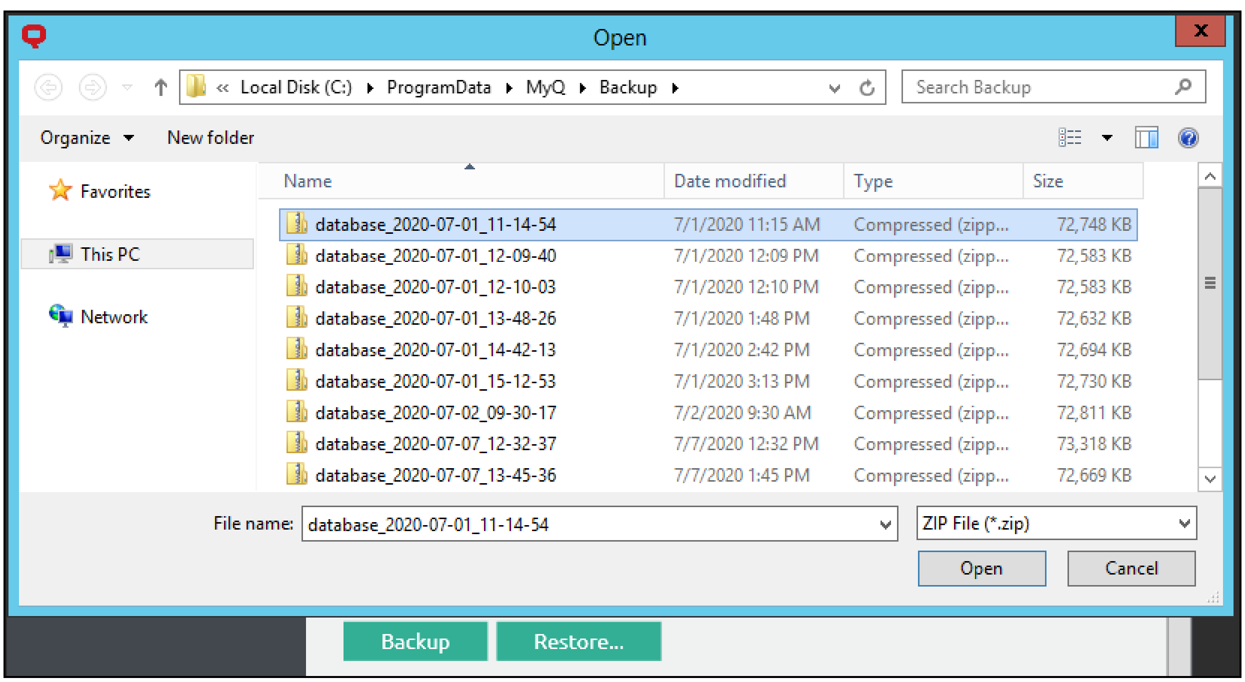
4. A new backup file is created.

4.5.2. Restoring MyQ data

To restore your MyQ data:

1. Open the **Database** tab.

2. In the **Main Database** section , click **Restore...**. Select the *database_*.zip* file and click **Open**. If the backup is password protected, there is a prompt to provide the password. The database is restored and, if needed, upgraded as well.



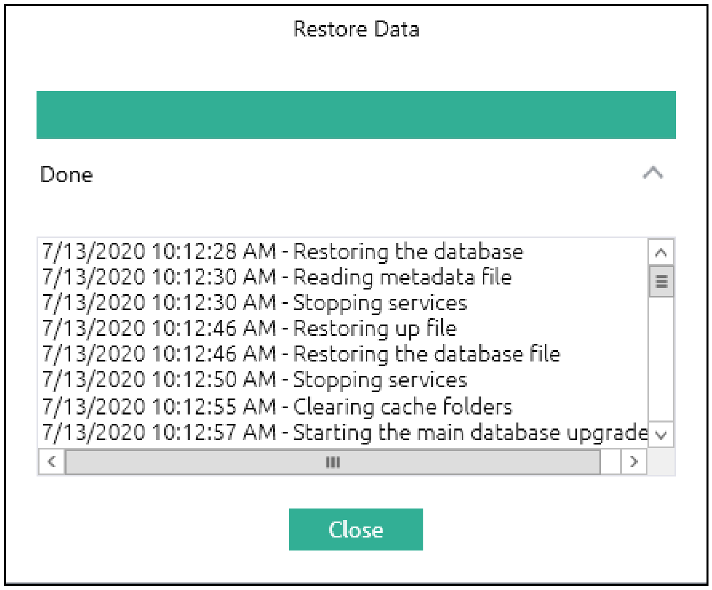


FIGURE 3.11. Restoring the database

4.5.3. Encrypting the main database

For better security, you can encrypt the main database using a certificate. MyQ does not provide these certificates. You should install and use your own. Once installed, they will be visible in the **Certificate** drop-down list.

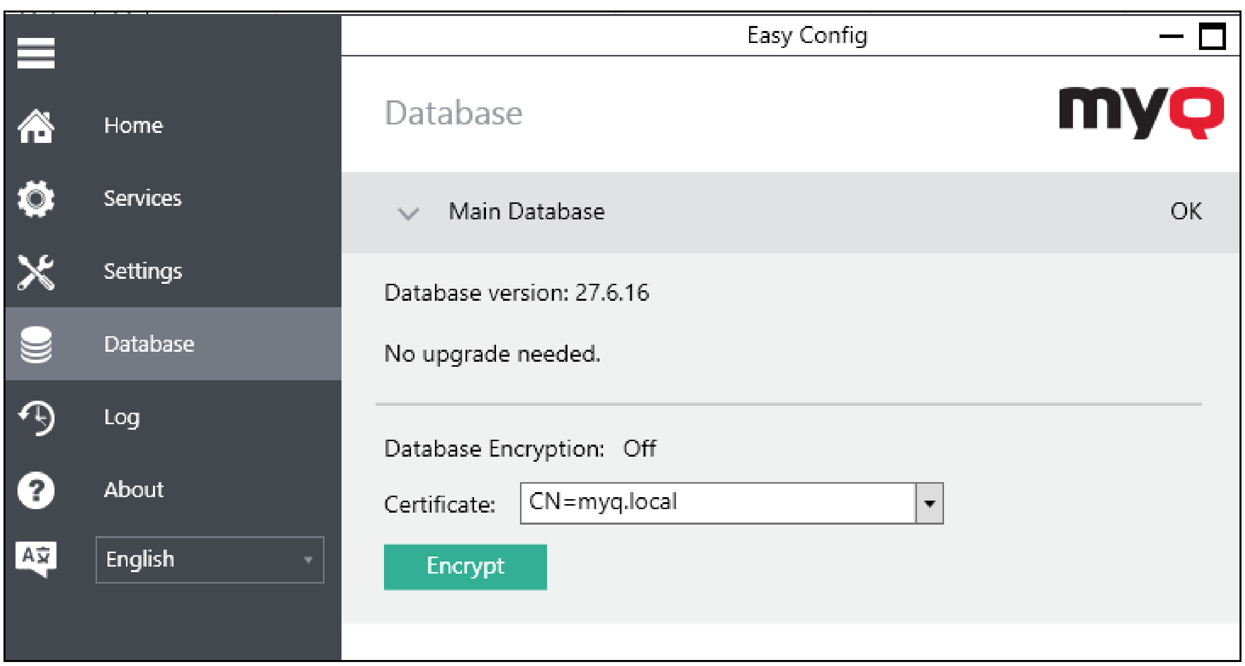


FIGURE 3.12. Encrypting the main database

During the encryption other services will not be available. A busy indicator will let you follow the encryption/decryption process:

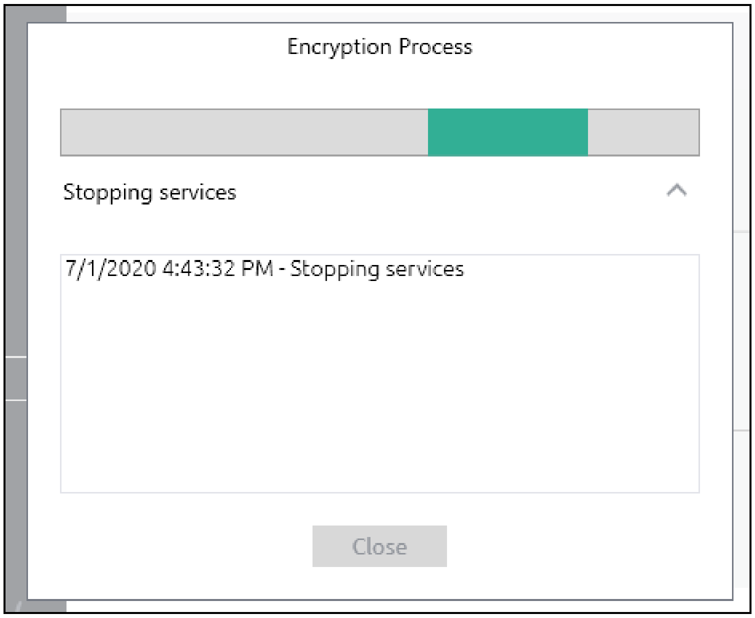


FIGURE 3.13. DB Encryption Busy indicator

After the encryption, the **Encrypt** button will change to **Decrypt** so you can reverse the action.

INFO: This functionality is only available for Embedded Databases. If you have an SQL Server, this section for encryption/decryption will not be displayed.

INFO: The Database Encryption requires a 32-byte length key. The key will be generated using the private key from a certificate stored on the local machine.

4.6. Changing the MyQ Web Server ports

On the **Settings** tab, under **Web Server**, you can change the port for the connection to the MyQ Web server:

- **Port**: communication port for the MyQ HTTP server; the default value is *8090* .

You can enable **Allow unsecure communication** only in case of communication problems.

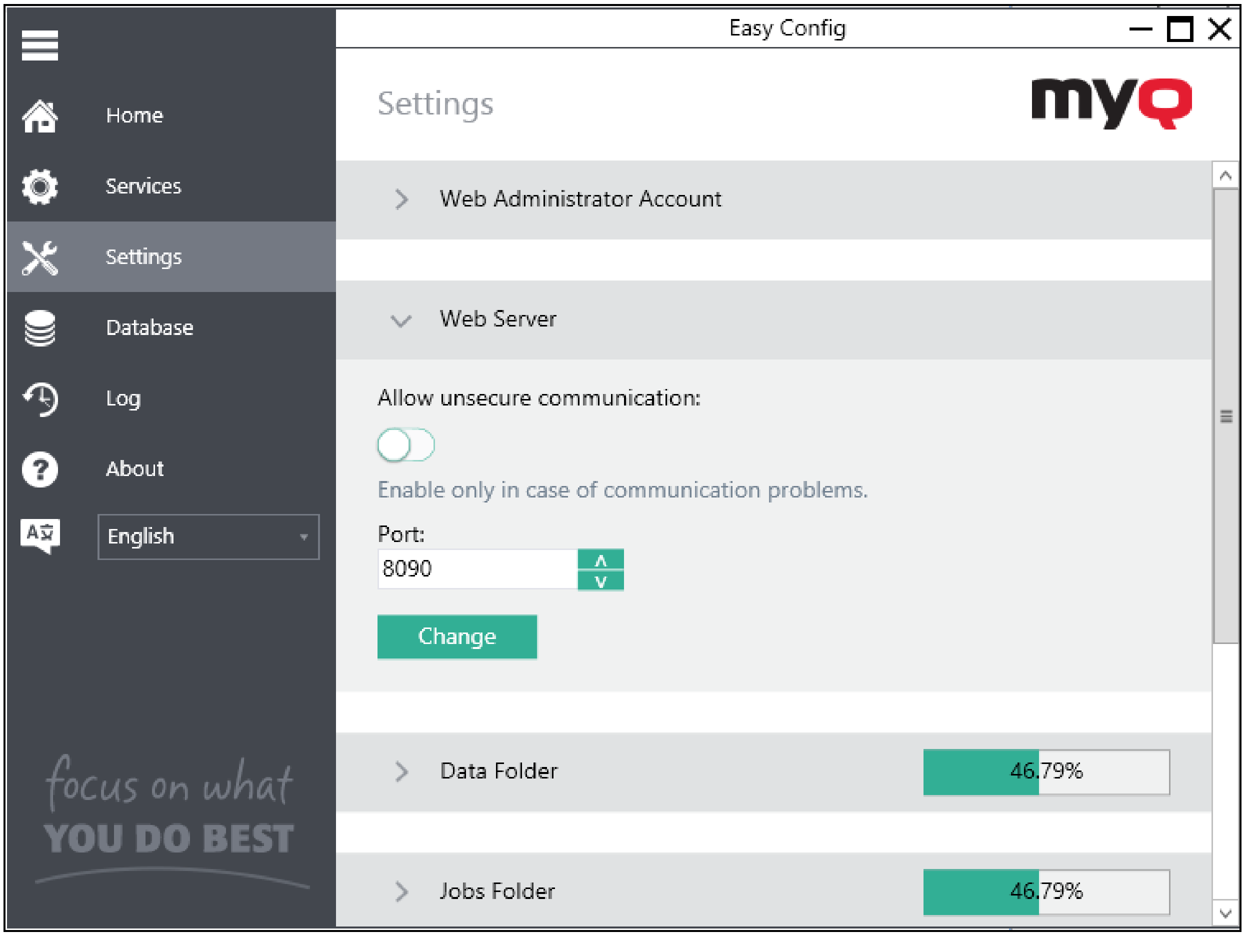


FIGURE 3.14. Port configuration on the Settings tab

4.7. Cleaning Cache and Temp folders

In the **Server maintenance** section of the **Settings** tab, you can clean up your **Cache** and **Temp** folders. This might be necessary in cases when problems with the temporary files affect the MyQ system.

To clean up the two folders, click **Start cleanup**.

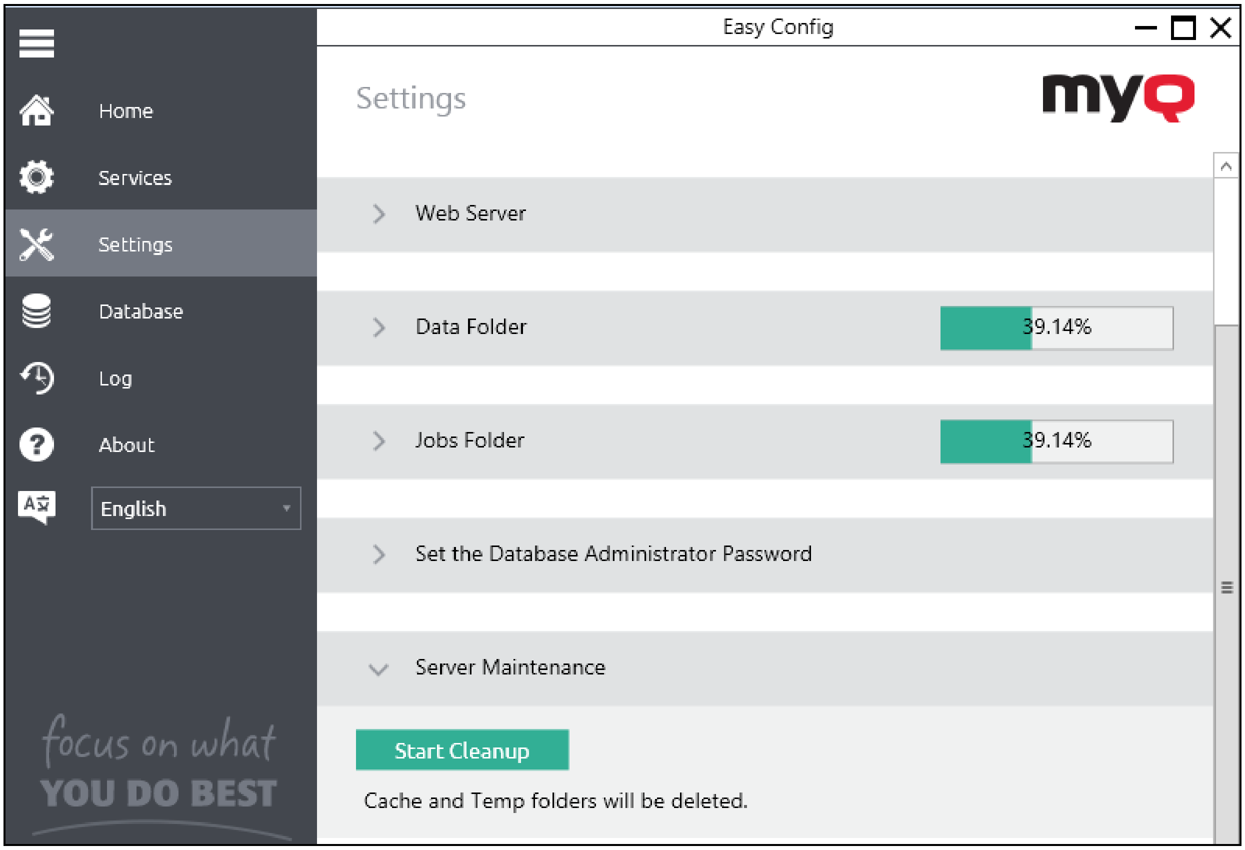


FIGURE 3.15. Cleaning up Cache and Temp folders

5. MyQ Web Interface

This topic describes the MyQ Web Interface where you manage most of MyQ functions. It shows you how to access the web interface and the two menus from which you can access all settings and functions on the web interface: the Main menu, and the Settings menu. Furthermore, it describes the web interface's Home dashboard and shows you how to perform the initial MyQ setup. The last two sections introduce two MyQ logs: the MyQ Log and the MyQ Audit Log.

FIGURE 4.1. MyQ Web Interface

5.1. Accessing the MyQ Web Interface

To access the MyQ Web Interface, you need to open it in your web browser and log in as an administrator:

Opening the interface

There are three ways to open the MyQ Web Interface:

- Open your web browser, and then enter the web address in the form: *https://*MyQserver*:8090*, where ***MyQserver*** represents the IP address or the host name of your MyQ server and *8090* is the default port for access to the server.

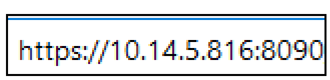


FIGURE 4.2. Entering the MyQ address on a web browser

INFO: In the secure mode of MyQ, the default access port is **8090**. When upgrading from a previous version to MyQ 8.0 you can still use the port 8080.

- Log on to the interface from the MyQ Easy Config application by clicking **Continue** on the **Home** tab, under **To continue with setup, go to web interface**.
- Open the **MyQ Web Administrator** application:
  - You can find this application on the **Apps** screen in Windows 8.1+, Windows Server 2012 and newer.

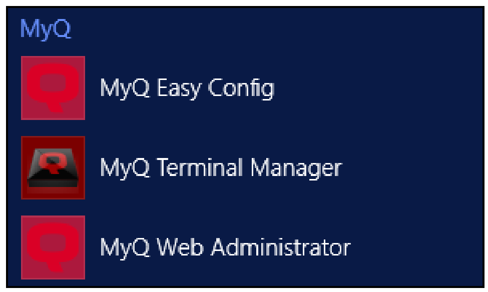


FIGURE 4.3. Accessing MyQ from the **Apps** screen in Windows 8.1

Logging in as an administrator

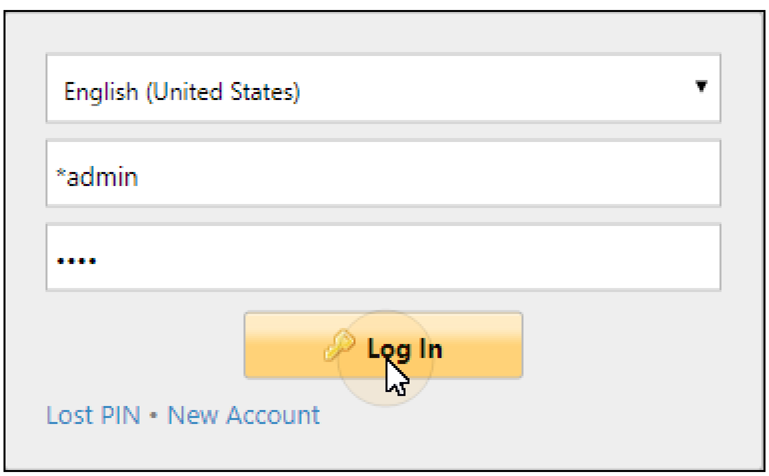


FIGURE 4.4. MyQ Web Administrator Interface login

- Enter the MyQ administrator name (**admin*) and the password that you have set in the **MyQ Easy Config** application, and then click **Login**. If you have not changed the default password yet, enter the default one: *1234*.

INFO: In the drop-down list at the top of the login window, you can select your preferred language.

NOTICE: By not changing the default password, you leave the MyQ system unsecured and enable others to easily access it. If you have not done it yet, we strongly recommend you to change the password in the **MyQ Easy Config** application.

5.2. Main menu and Settings menu

There are two main menus from which you can access all the features and settings of the MyQ server: the Main (MyQ) Menu and the Settings menu. They are described in the following two sections.

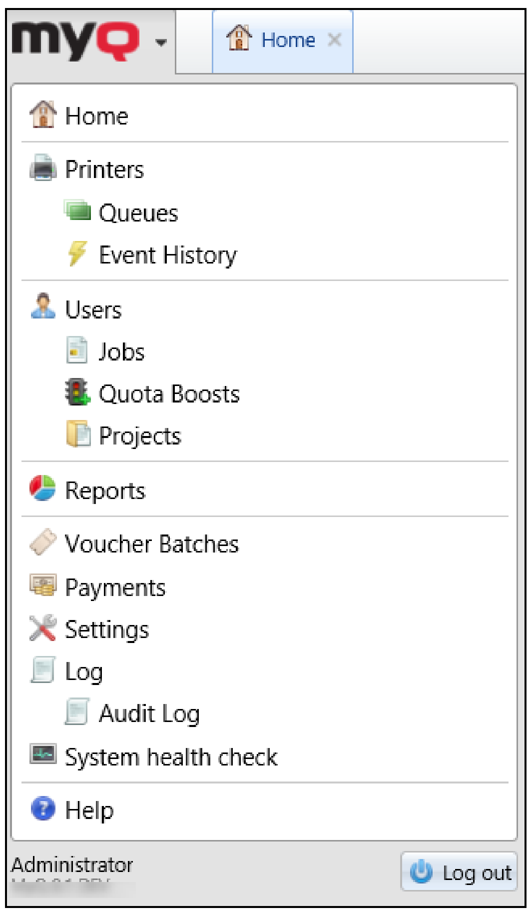


FIGURE 4.5. MyQ Main menu

5.2.1. Main menu

To open the **Main menu**, click the **MyQ** logo at the upper-left corner of the screen.

From the menu, you can access the **Home** dashboard, the **Settings** menu and a number of tabs where you can manage and use MyQ functions.

In this guide, all the tabs accessed from the **Main** menu, except for the **Home** screen and **Settings** menu, are called **main** tabs as opposed to **settings** tabs that are accessed from the **Settings** menu.

5.2.2. Settings menu

To open the **Settings** menu, click **Settings** on the **Main** menu.

The tabs that are accessed from the **Settings** menu serve for the global setup of the MyQ server.

5.3. Home dashboard

On the **Home** dashboard, you can perform the initial MyQ setup. After the setup, you can use the dashboard to directly access MyQ key features, to display statistics and to generate data for support.

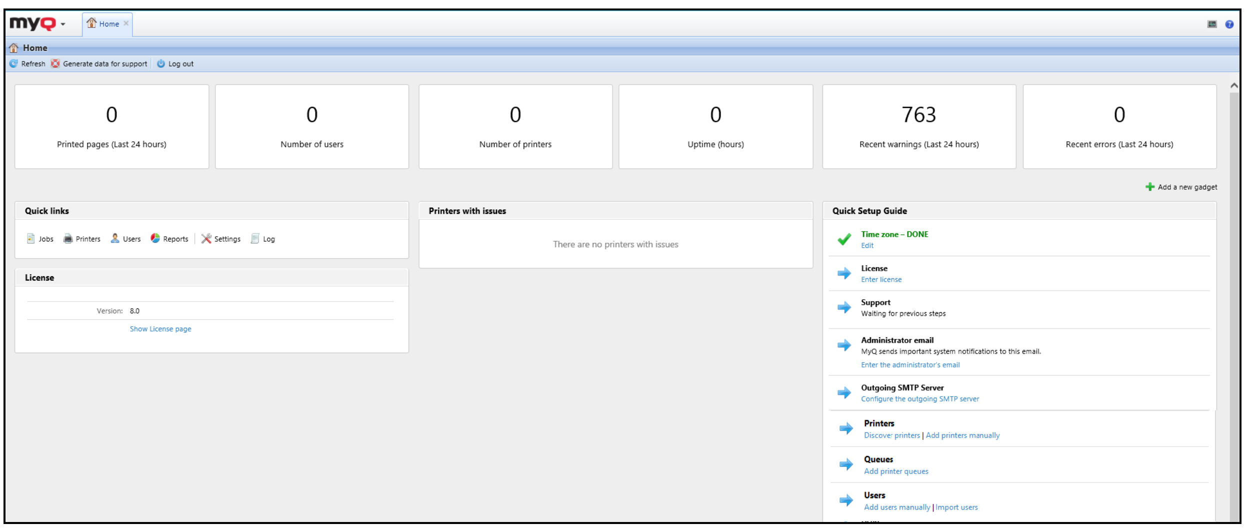


FIGURE 4.6. MyQ **Home** dashboard with the **Quick Setup Guide** before initial setup

The dashboard is fully adjustable; it consists of multiple building blocks (gadgets) that can be added and removed from the screen. You can use the blocks to customize both the layout and functionality of the dashboard.

Printers with issues shows unreachable active printers and active printers with unresolved alerts. You can also see these issues in the **Issues** column of the Printer overview, click **MyQ - Printers** to view.

Six standard information blocks give you system information.

Info	Description
Printed pages (Last 24 hours)	Number of printed pages over the last 24 hours. Cached every 60 seconds.
Number of users	Number of active users. Clicking opens the overview of Users page.
Number of printers	Number of printers where the status is not: Local, replicated or deleted. Cached every 15 seconds. Clicking directs you to the Printers page.
Uptime (hours)	Uptime of the MyQ system, in hours.
Recent warnings (Last 24 hours)	Number of warning log messages over the last 24 hours. Cached every 30 seconds.
Recent errors (Last 24 hours)	Number of error and critical log messages over the last 24 hours. Cached every 30 seconds.

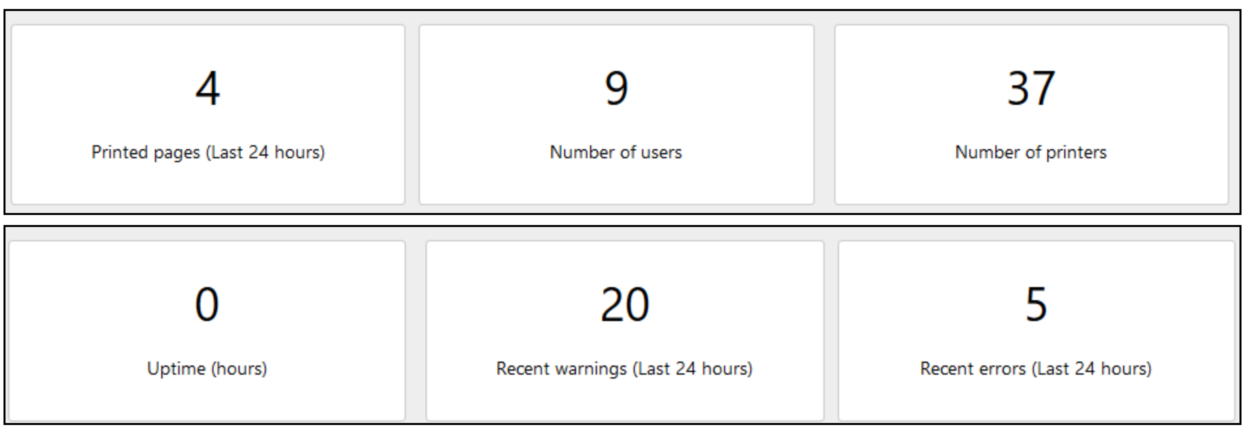


FIGURE 4.7. The MyQ **Home** dashboard with the information blocks

5.3.1. Adjusting the dashboard

By default, there are four gadgets on the dashboard: **Quick links**, **License**, **Printers with issues** and **Quick Setup Guide**. Apart from these, you can use the following additional gadgets:

- **Top Active: Devices**: Shows the most active printing devices.
- **Top Active: Groups**: Shows the most active printing groups.
- **Top Active: Users**: Shows the most active users.

Adding new gadgets and moving gadgets on the dashboard

To add a new gadget:

1. Click **Add a new gadget** at the top-right corner of the dashboard. The **Add a new gadget** dialog box appears.

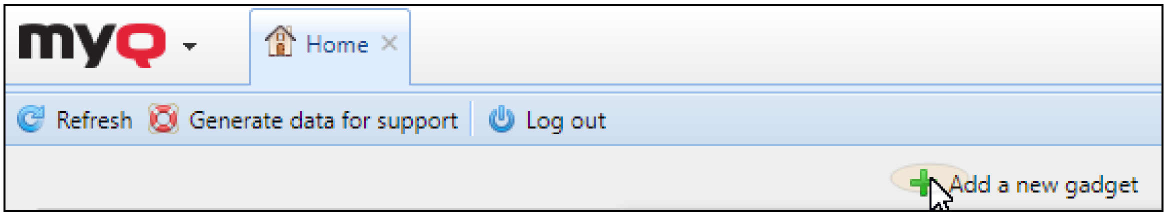


FIGURE 4.8. Opening the **Add a new gadget** dialog box, where the new gadgets can be selected.

2. In the dialog box, select the gadget, and then click **OK**. The new gadget is displayed on the board.

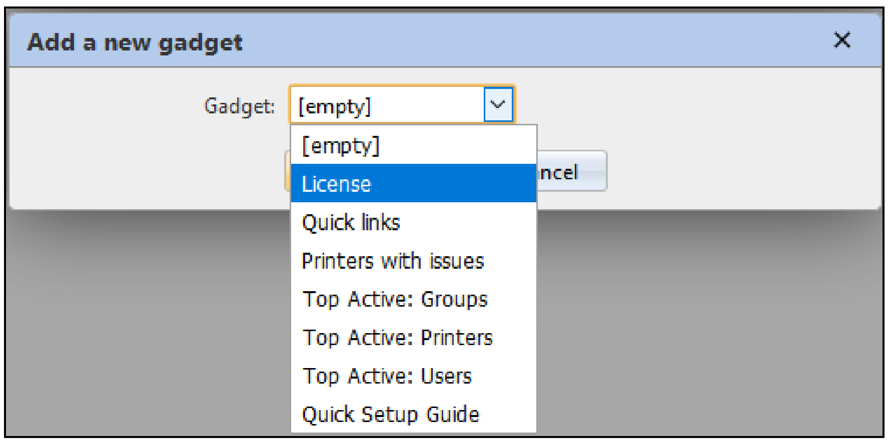


FIGURE 4.9. Selecting the new gadget.

INFO: To move gadgets, drag and drop them on the board.

Deleting gadgets from the dashboard

To delete a gadget from the dashboard, point at the upper-right corner of the gadget, click the down-arrow button and click **Delete**.

FIGURE 4.10. Deleting a gadget from the dashboard

5.3.2. Initial setup of the MyQ server on the Quick Setup Guide gadget

On the Quick Setup Guide gadget, you can set the basic and most important features of the MyQ system:

Time zone

- Here you can see if the time zone set in MyQ matches the Windows system time set on the server.
- By clicking **Edit**, you open the **General** settings tab, where you can adjust the time zone.

License

Adding and activating licenses

Click **Enter License**. The **License** Settings tab opens. You are asked to enter the following information about your installation.

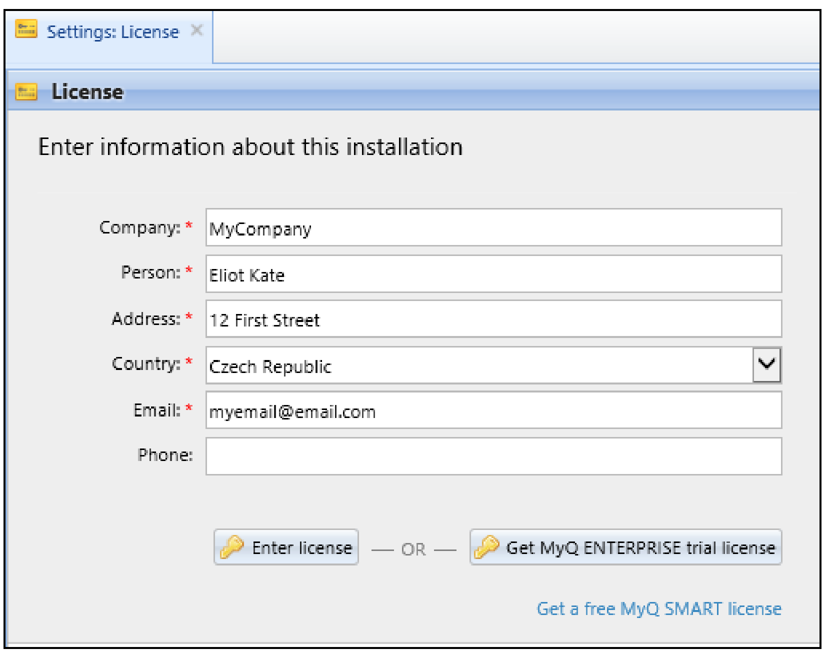


FIGURE 4.11. Adding customer information

Then you can either:

- Click the **Enter License** button, if you already have license or installation keys to add. Add the license/installation keys (one key per row) and click **Next**.
- Or click the **Get MyQ ENTERPRISE trial license** button, to get a two-month trial ENTERPRISE license for an unlimited number of printers and a two-month trial license for ten embedded terminals. (These licenses are automatically activated.)
- Or click **Get a free MyQ SMART license**, to request for the free MyQ SMART license.

Support

With active support licenses, you have access to MyQ technical support and free MyQ products upgrades.

Adding or Extending support licenses

- Click **+Add support license**. The dialog box appears where you can add the support license.

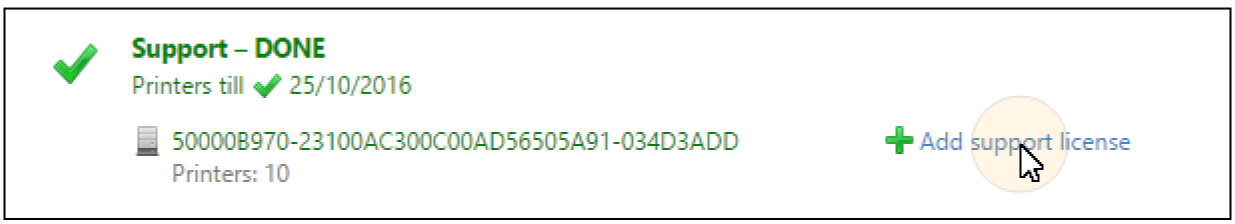


FIGURE 4.12. Extending support licenses on the **Home** screen

Administrator email

By clicking **Enter the administrator's email**, you open the **General** settings tab, where you can set the administrator email.

> **INFO:** Important system messages (disk space checker warnings, license expiration etc.) are automatically sent to this email.

Outgoing SMTP server

By clicking **Configure the outgoing SMTP server**, you open the **Network** settings tab, where you can set the outgoing SMTP server.

Printers

Adding printers:

- By clicking **Discover Printers**, you open the **Printer discovery** settings tab, where you can discover and add printing devices.
- By clicking **Add printers manually**, you open the **Printers** main tab, where you can add printing devices. (See *"Manually adding printing devices"* on page 74.)

Activating added printers:

- Click **Activate** to activate all the added printing devices.

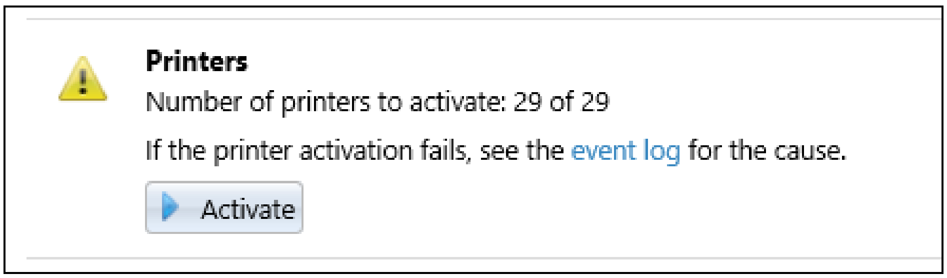


FIGURE 4.13. As long as there are any added printers that are not activated, the **Activate** button is displayed.

NOTICE: You can activate only as many printers as your license supports.

Queues

- By clicking **Add printer queues**, you open the **Queues** main tab, where you can add queues. (See *"Queues "* on page 173.)

Users

- By clicking **Add users manually**, you open the **Users** main tab, where you can add users.
- By clicking **Import users**, you open the **Users synchronization** settings tab, where you can import users from the Central server, from LDAP servers or from a CSV file.

5.3.3. Generate data for support

In case you encounter a problem that requires help from the MyQ support team, you may be asked to provide more information about your MyQ system configuration, licenses, printer devices, terminals, etc. In such case, you need to generate a MyQ-helpdesk.zip file, which contains multiple files with all the necessary information, and send it to the MyQ support team.

The .zip file includes the **Logs** folder which contains:

- error logs from Apache and PHP,
- two MyQ log files (*log_*dateandtime*.csv*, *log_*dateandtime*.xlsx*),
- and the *MyQ-helpdesk.xml* file with MyQ system information.

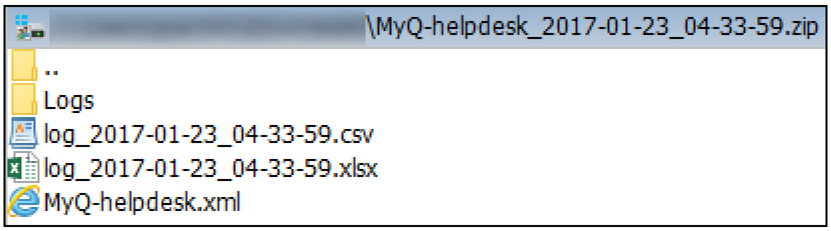


FIGURE 4.14. Files included in the MyQ-helpdesk .zip

INFO: Both MyQ log files correspond to the MyQ log that can be displayed on the MyQ Web Interface or in the MyQ Easy Config application, but they differ from each other. The **XLSX** log file is more transparent and contains attachments with additional information. The only advantage of the **CSV** file is that it does not need to be opened in a spreadsheet application, such as Excel or OpenOffice Calc.

NOTICE: You should send the MyQ-helpdesk.zip file each time you ask for technical support regarding the MyQ system.

To generate the MyQ-helpdesk.zip file

1. Click **Generate data for support** on the bar at the top of the **Home** dashboard. The **Generate data for support** dialog box appears.
2. In the dialog box, specify the date and the exact time span of the MyQ events to be contained in the MyQ-helpdesk file, select if additional log files should be included, and then click **Export**. The file is generated and saved to your Downloads folder.

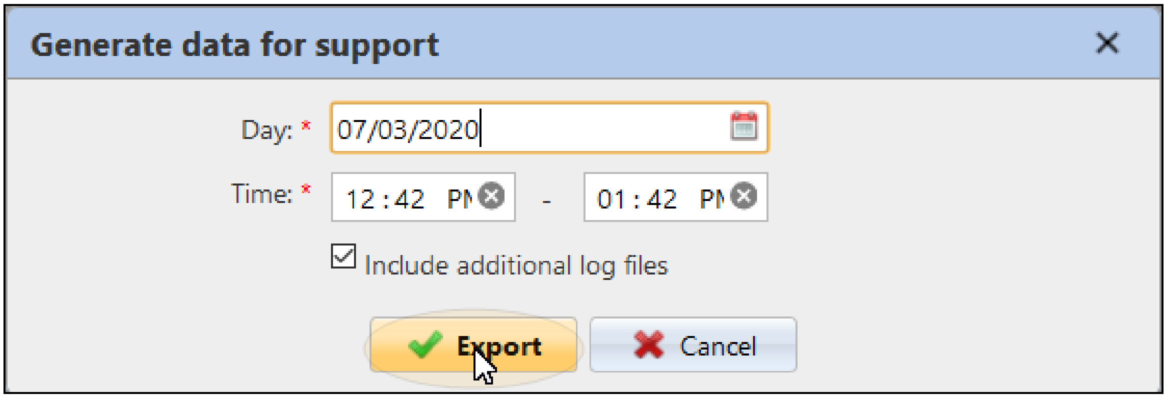


FIGURE 4.15. Selecting the MyQ-helpdesk .zip file options on the **Generate data for support** dialog box

5.3.4. Quick links to important tabs of the MyQ Web Interface

From the quick links toolbar, you can directly access the most important tabs of the MyQ Web Interface.

FIGURE 4.16. Quick links on the **Home** screen

5.4. MyQ Server's Log

In the log, you can find information about all parts of the MyQ server: the MyQ server, MyQ Web UI etc. Log messages are sorted into these types **Critical**, **Error**, **Warning**, **Info**, **Notice**, **Debug**, **Trace** and you can select the types that you want to be displayed. You can also set the log to display only messages informing about specific MyQ subsystems, such as the Web UI, remote printer setup, user sessions on MyQ terminals, and also about a specific context, for example, direct printing or a specific printing device.

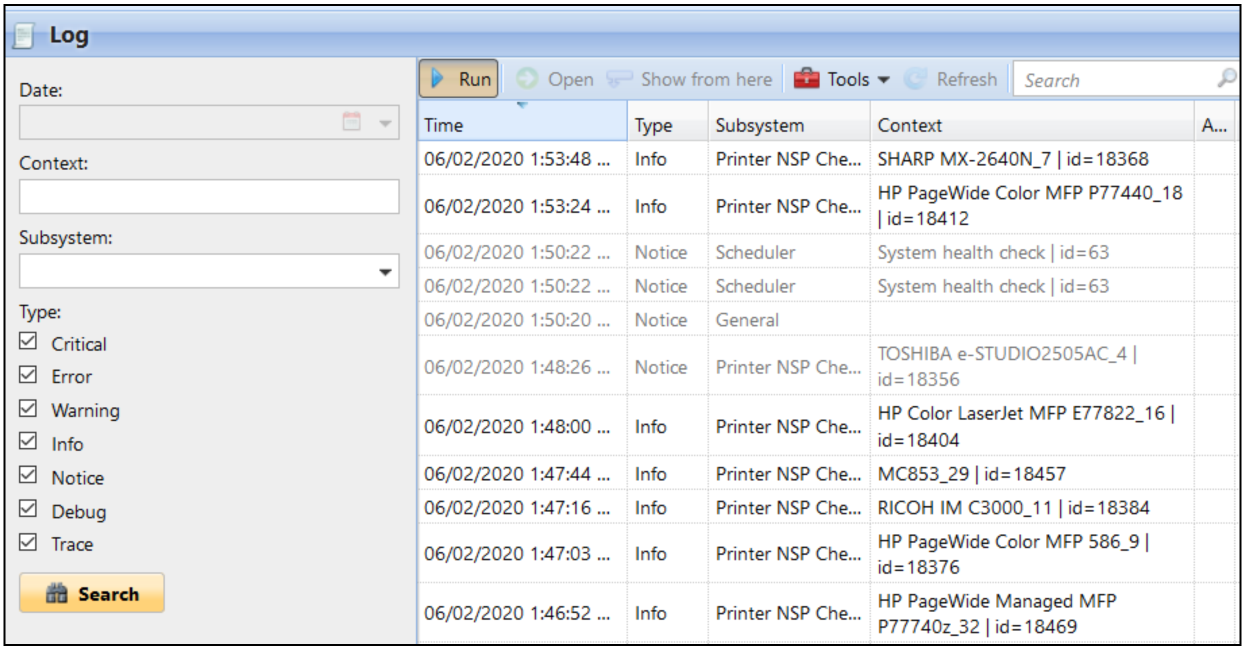


FIGURE 4.17. The **Log** tab on the MyQ Web Interface

The log is updated in real time, but you can pause it and select to show messages from a specific time period, such as yesterday, this week, last week, last X hours, last X weeks etc.

Opening the MyQ Log

On the MyQ Web User Interface, click **MyQ**, and then click **Log**, or on the **Home** dashboard, click **Log** on the **Quick links** gadget.

Pausing/Refreshing the log

To pause or resume the real time run of the log, click **Run** on the bar at the top of the **Log** tab. To refresh the log up to the current moment, click **Refresh** on the same bar.

Filtering the log: selecting time period, types of information, subsystem or context

You can filter the log on the panel:

- After you pause the log, you can select the period in the **Date** combo box.
- The types can be selected and deselected on the panel at the right side of the **Log** tab.
- On the **Subsystem** combo box, you can select / type one or more subsystems to be displayed in the log.
- In the **Context** text box, you can type the context to be displayed.

After the filters are set, click **Search** to submit them.

Exporting the log/Generating data for support

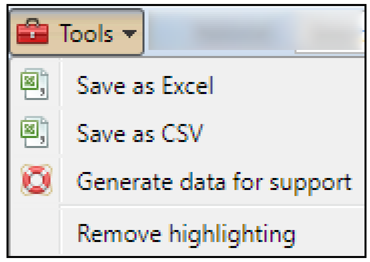
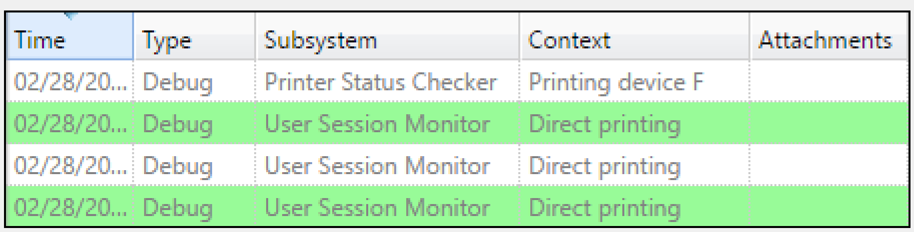


FIGURE 4.18. Log export options

Click **Tools** on the bar at the top of the **Log** tab, and then select one of the following export options:

- **Save as Excel** — export the log as an Excel file
- **Save as CSV** — export the log as a CSV file
- **Generate data for support** — generates a .zip file with multiple files for MyQ support (see *"Generate data for support"* on page 35) .

NOTICE: You can highlight particular log messages. To do so, select the message that you want to highlight and then press the **SHIFT + SPACE** keyboard shortcut.



Time	Type	Subsystem	Context	Attachments
02/28/20...	Debug	Printer Status Checker	Printing device F	
02/28/20...	Debug	User Session Monitor	Direct printing	
02/28/20...	Debug	User Session Monitor	Direct printing	
02/28/20...	Debug	User Session Monitor	Direct printing	

FIGURE 4.19. Highlighted log messages

To remove all highlights, click **Tools** on the bar at the top of the **Log** tab, and then click **Remove highlighting** (See FIGURE 4.18 above.).

5.5. MyQ Audit Log

In the audit log, you can view all changes of MyQ settings, along with information about who made the changes, the time when they were made and which subsystem of MyQ was affected by them.

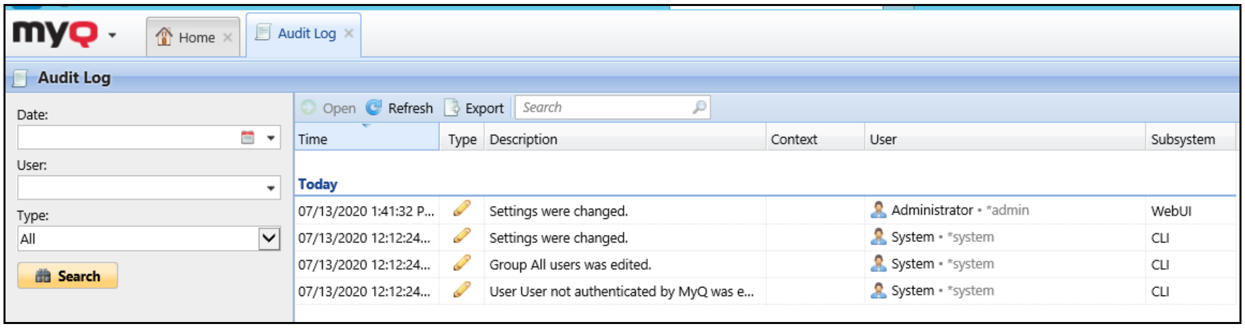


FIGURE 4.20. The MyQ Audit Log

Opening the MyQ Audit Log

On the MyQ Web User Interface, click **MyQ**, and then click **Audit Log**.

Filtering the log: selecting time period, user and type of event

The displayed data can be filtered by a time period, the user who made the changes and the type of the event.

> **INFO:** To display additional information about a particular change, double-click the change. A panel with the detailed information opens on the right side of the **Audit Log** tab.

6. MyQ System Settings

This topic discusses basic system settings of the MyQ system. The settings are located on separate tabs, accessed from the **Settings** menu:

- On the **General** settings tab, you can set the Administrator email, change regional settings, and other general settings.
- On the **Personalization** settings tab, you can add custom help links and custom logos to be used in various parts of the MyQ system.
- On the **Network** settings tab, you can modify network settings such as certificates, server ports, etc.
- On the **Authentication server** settings tab, you can add LDAP and Radius servers for user authentication.
- On the **Task scheduler** settings tab, you can add new task schedules, change their settings and run scheduled tasks.
- On the **Log & Audit** settings tab, you can set the Log notifier feature, which enables sending notifications about selected log events to the administrator and/or any number of MyQ users.
- On the **System management** settings tab, you can change settings of the MyQ history, set the maximum size of files that can be uploaded on the MyQ Web Interface, delete data from the MyQ database, and also reset MyQ components to apply settings previously made on other tabs.

6.1. General settings tab

The General settings tab holds the section **General**.

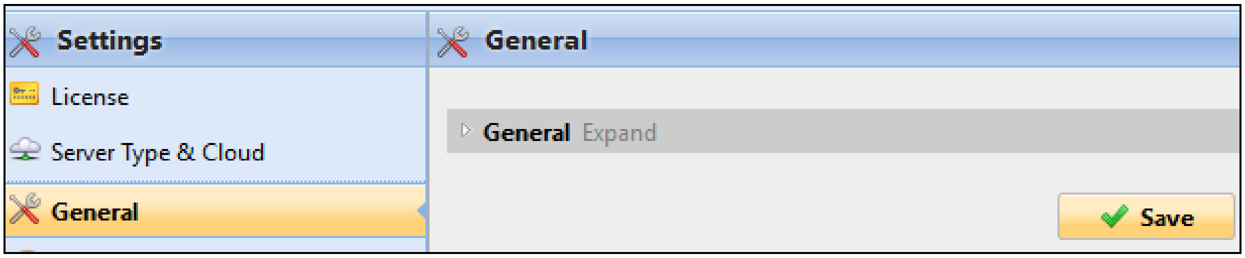


FIGURE 5.1. The **General** settings tab of the MyQ Web Interface

6.1.1. General

In this section, you can set the administrator email, time zone, default and additional languages, currency and the column delimiter in CSV files.

- **Administrator email**: The administrator email receives important system messages (disk space checker warnings, license expiration, etc.) automatically sent from MyQ.
- **Time zone**: For the proper functioning of the MyQ system, make sure that the time zone set here is the same as the time zone set in the Windows operating system. After changing the time zone, you will be asked to restart the web server.
- **Default Language**: The default language setting determines the language of all emails that are automatically sent from MyQ and the language used on all connected terminals and interactive readers.
- **Additional languages**: You can set additional languages that will be used for custom fields. This way you can enter different names of the fields to be used in different languages.
- **Currency**: In the currency setting, you can enter the 3-letter currency code of the currency that you want to use in your pricelist.
    - The **Number of digits after the decimal point** option can be set from *0* to *5* (default is *2*).
- **Column delimiter in CSV**: The column delimiter in CSV files setting determines the delimiter in source and destination files used for all the import and export operations to and from the CSV file format. The default value is based on the regional settings of your operating system.

6.2. Personalization settings tab

On this tab, you can set a custom message to be shown on the Web accounts of MyQ users, add links to your own custom help and custom application logos to be used in MyQ, on MyQ terminals and in the MyQ Smart Job Manager.

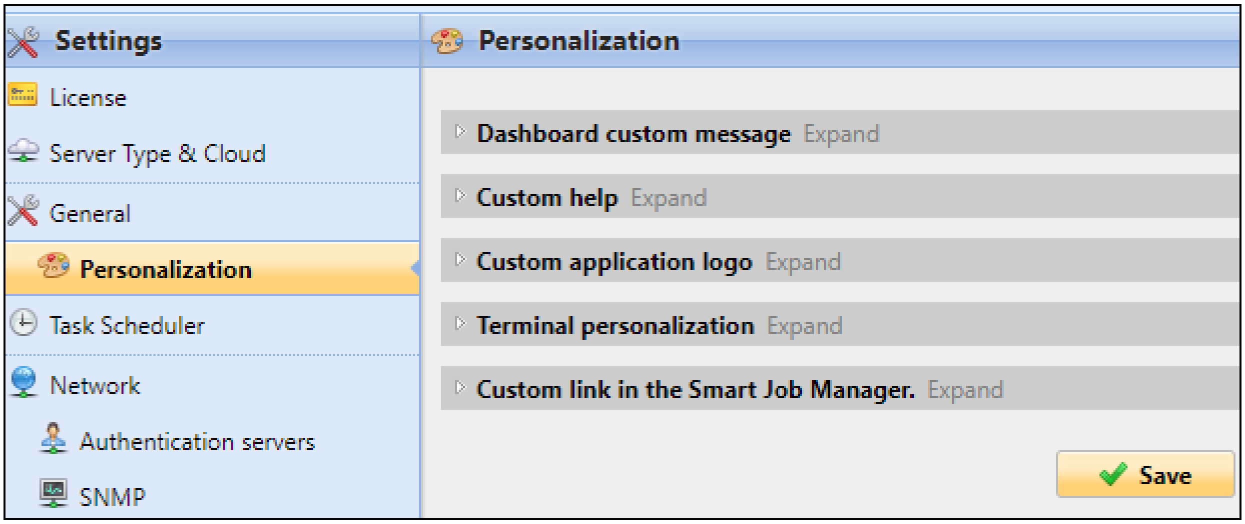


FIGURE 5.2. The **Personalization** settings tab of the MyQ Web Interface

6.2.1. Dashboard custom message

Here you can enter a message to be displayed on the Web accounts of MyQ users. After you change the message, click **Save** at the bottom of the **Personalization** tab.

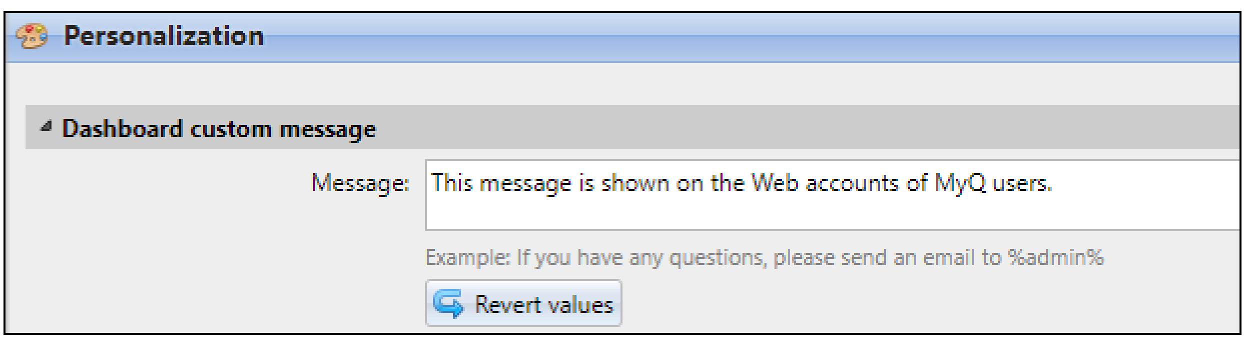


FIGURE 5.3. The custom message for MyQ users

The **%admin%** parameter can be used to display the email address of the MyQ administrator within the message (the **Administrator email** set on the **General** settings tab; see *"General"* on the previous page).

6.2.2. Custom application logo

Here you can add your company's logo to be used in the MyQ system. The logo will appear on the upper-right corner of the MyQ Web Interface, on MyQ credit vouchers, in the MyQ Smart Job Manager and on reports. Supported picture formats are *JPG/JPEG/PNG/BMP* and the recommended size is *398px* x *92px*.

To import the logo, click **+Add**, **Browse** for the file and **Open** it, and then click **Save** at the bottom of the tab. A preview of the new logo is displayed on the tab.

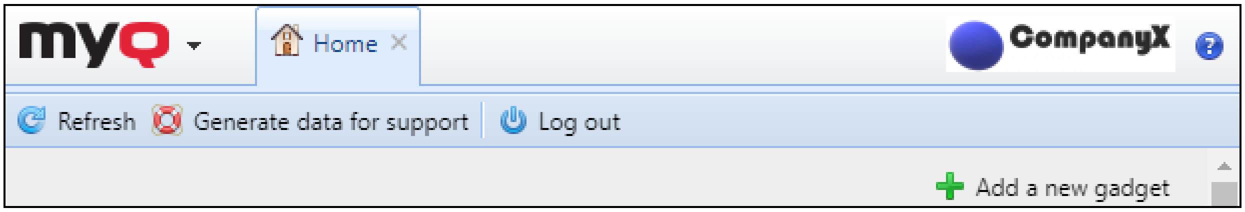


FIGURE 5.4. Example of a custom logo displayed at the upper-right corner of the MyQ Web interface

6.2.3. Terminal personalization

Here you can add your company's logo to be used on all your MyQ embedded terminals. Supported formats are *JPG/JPEG/PNG/BMP* and the recommended size is *340px* x *92px*.

You can also add a Theme to the logo. You need the Theme Editor to create such a theme. The *Theme editor manual* is available on the [MyQ Community portal.]()

To import the logo, click **+Add**, **Browse** for the file and **Open** it, and then click **Save** at the bottom of the tab. A preview of the new logo is displayed on the tab.

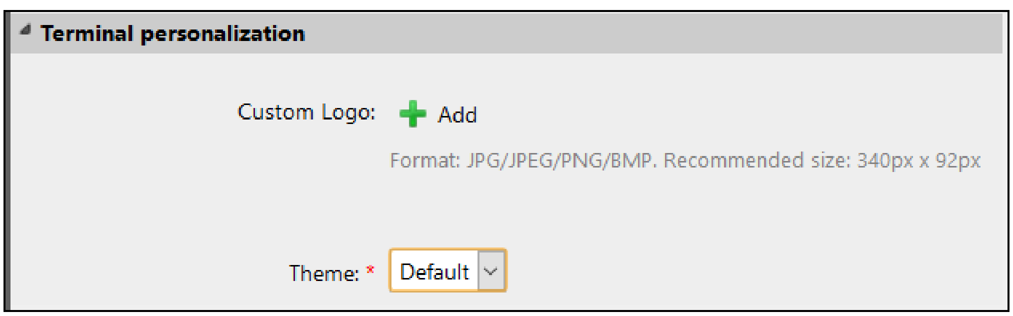


FIGURE 5.5. Importing the custom application logo to embedded terminals

6.2.4. Custom help

Here you can add a link to your own web based help that will be displayed as a gadget on the user's MyQ home page.

To add a custom help link, enter the title and the link of your custom help, and then click **Save** at the bottom of the tab.

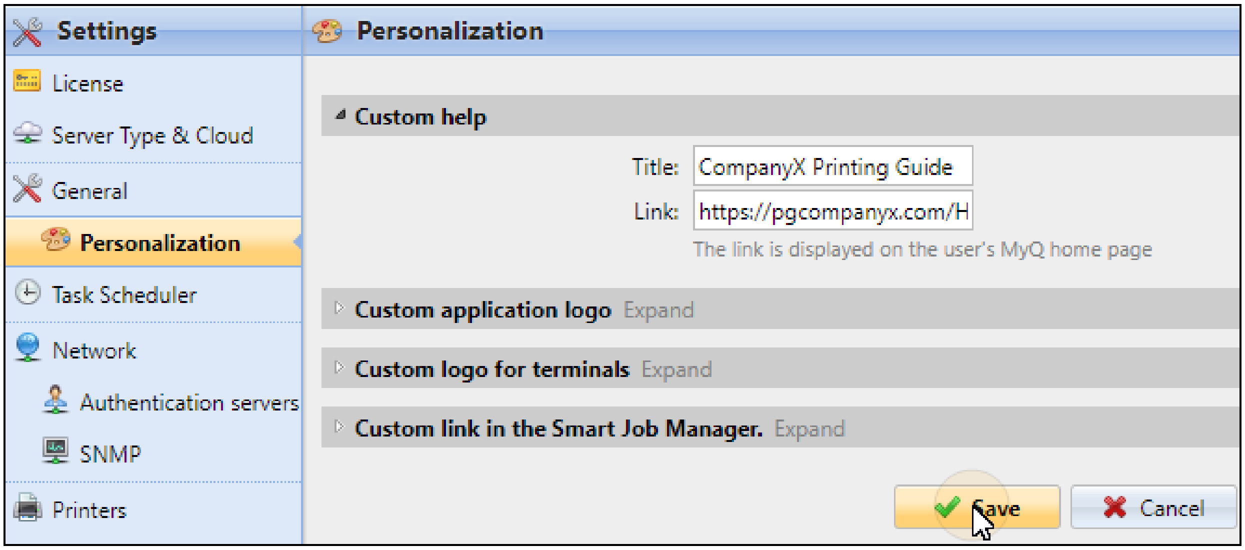


FIGURE 5.6. Adding a custom help link to MyQ

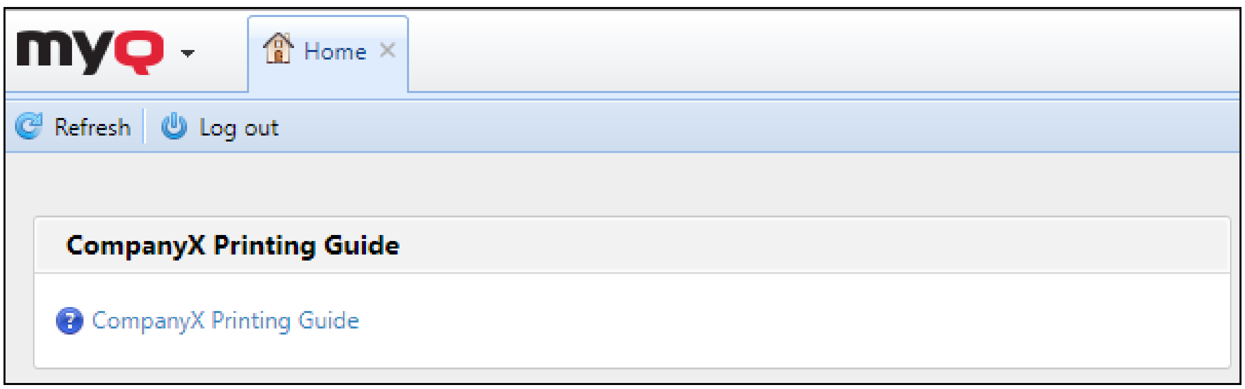


FIGURE 5.7. Example of a custom help gadget displayed on the user's home page on the MyQ Web Interface

6.2.5. Custom link in the MyQ Smart Job Manager

Here you can add a link to your own web based help (weblink, network path or local path) that will be displayed in the MyQ Smart Job Manager.

To add the custom help link, enter the title and the link of your custom help, and then click **Save** at the bottom of the tab.

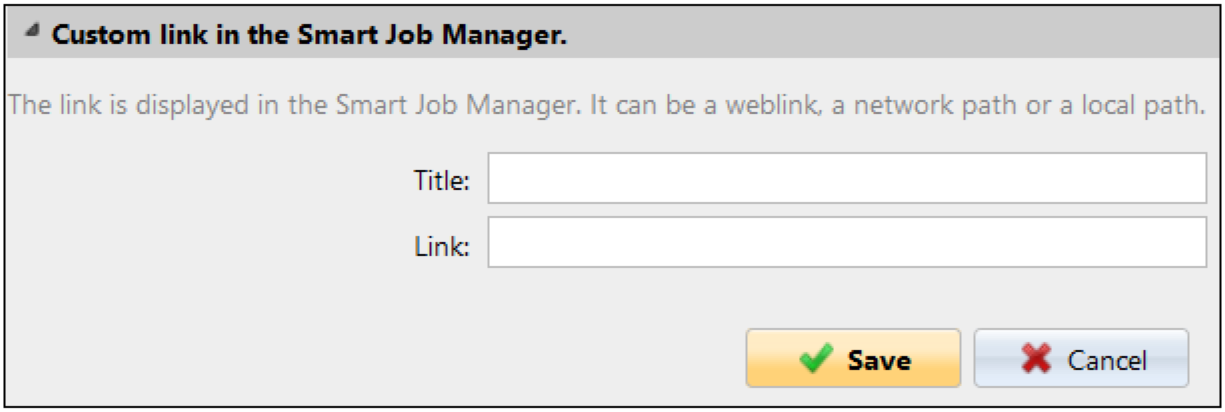


FIGURE 5.8. Adding a custom help link to MyQ Smart Job Manager

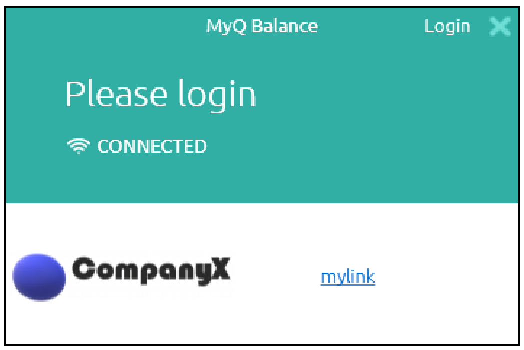


FIGURE 5.9. The custom link in the Smart Job Manager

6.3. Network settings tab

On the **Network** settings tab, you can manage the network communication between the MyQ server and other parts of the MyQ solution. It is divided into the following sections: **General**, **Communication Security**, **MyQ SMTP server**, **Mobile application**, **Outgoing SMTP server**, **HTTP Proxy server**, **Firewall** and **Kyocera provider**.

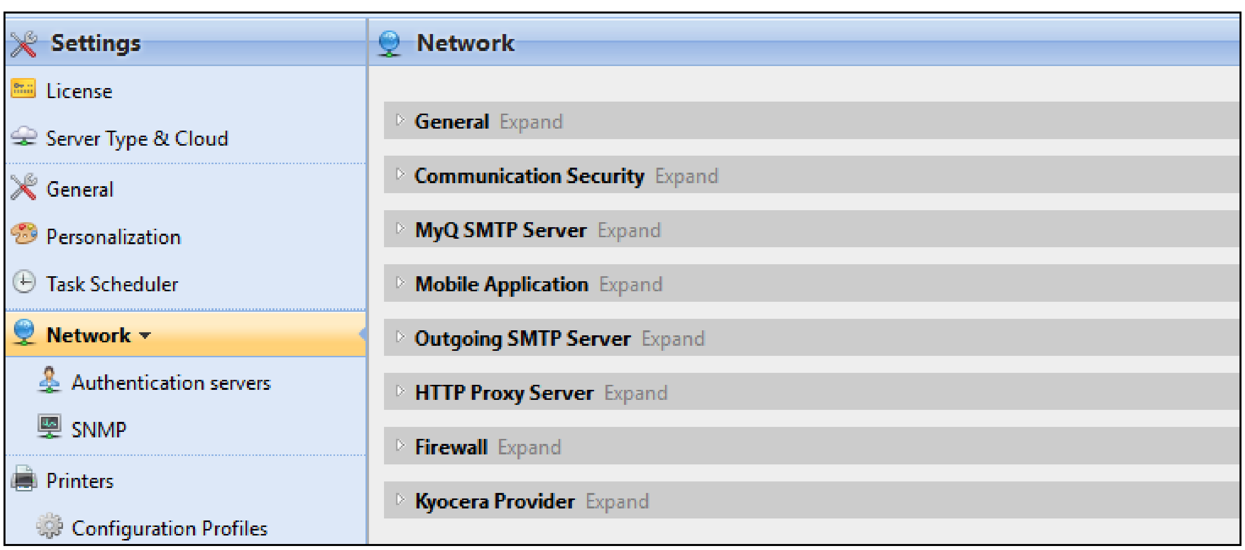


FIGURE 5.10. The **Network** settings tab on the MyQ Web Interface

6.3.1. General

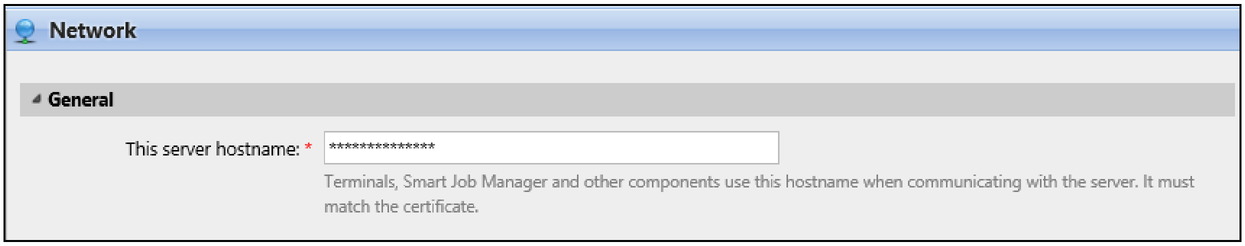


FIGURE 5.11. MyQ server's hostname

In this section, you can enter the hostname of the MyQ print server. This hostname is used by external components of the MyQ system, such as embedded terminals or the MyQ Smart Job Manager, for communication with the MyQ server.

> **INFO:** During remote setup, the server hostname should be a valid hostname or IP-address. A licenses update might change the hostname to *myq.local*. Then the remote setup will fail and result in an error message.

> **INFO:** On some embedded terminals, you can select if you want to remotely set the hostname of the server instead of the IP address during the remote setup of the device. For more information, see MyQ embedded terminal manuals dedicated to particular brands.

6.3.2. Communication Security

In this section, you can upload your security certificate.

- To upload a security certificate:

    1. Click **Change certificate**. The **Change Certificate** dialog box appears.
    2. In the respective column, click **Choose files**. The **Open** dialog box appears. You can select from the **PEM** format and the **PFX (P12)** format.

```
# OpenSSL configuration file for creating a CSR for a server certificate
# Adapt at least the CN, DNS.1, C and O lines, and then run
# "c:\Program Files (x86)\MyQ\Apache\bin\openssl.exe" req -new -config CSR.conf -keyout myserver.key -out myserver.csr
# on the command line.

[req]
default_bits = 2048
default_md = sha256
prompt = no
encrypt_key = no
distinguished_name = req_distinguished_name
req_extensions = v3_req

[req_distinguished_name]
# Country Name
C = US
# State or Province Name, not required un-comment if needed
#ST = VA
# Locality Name, not required un-comment if needed
#L = SomeCity
# Organization Name
O = MyCompany
# Organizational Unit Name, not required un-comment if needed
#OU = MyDivision
# FQDN of the MyQ server
CN = www.company.com

[v3_req]
keyUsage = keyEncipherment, dataEncipherment
extendedKeyUsage = serverAuth
subjectAltName = @alt_names

[alt_names]
# Please note: all DNS names must resolve to the same IP address as the FQDN.
# DNS.1 should be same as CN
# Edit and un-comment rows 2+ as needed
DNS.1 = www.company.com
#DNS.2 = company.com
#DNS.3 = www.company.net
#DNS.4 = company.net
```

FIGURE 5.12. Example certificate

3. Browse and select the certificate that you want to upload, and then click **OK**.

- Click **Generate Certificate** to recover the default MyQ test certificate (MyQ.local). The files *server.cer* , *server.key* and *server.pfx* are stored in *C:\ProgramData\MyQ\Cert*.

INFO: For more information about network security communication, see the latest **MyQ Security Whitepaper**.

6.3.3. MyQ SMTP server

In this section you can view or change the port assigned to the MYQ SMTP server. If scanning to MyQ is enabled, set the port shown here in the device's SMTP settings.

6.3.4. Mobile Application

In this section, you can set the server hostname or IP address and the communication port for using the MyQ mobile application.

6.3.5. Outgoing SMTP server

To send email reports, send error messages to users, send automatically generated PIN to users and forward scanned documents, you have to configure the email server where all the emails are forwarded to.

To configure the server, do the following:

1. Enter the server hostname or IP address in the **Server** text box. If the email server listens to other than the 25 TCP port, change the **Port** setting to the correct value.
2. Choose between the *None, SSL* and *STARTTLS* **Security** options.
3. Optionally choose to **Validate certificate** or not.
4. If credentials are required, enter the **User** and **Password**.
5. Enter the address that you want to be displayed as the **Sender email** on PIN, alert and report messages.
6. After you enter the data, you can click **Test** to test the connection to the email server.

6.3.6. HTTP Proxy Server

In this section, you can set up a MyQ Proxy server which can be used for activating a license (only used with the old licensing model). Mandatory fields are **Server** (name) and **Port**. This is not supported for installation keys generated from the MyQ X Partner portal (new licensing model).

> **NOTICE:** After changing ports, restart all MyQ services.

6.3.7. Firewall

In this section, you can automatically open all the ports on the Microsoft Windows Firewall that are necessary to run the MyQ application.

6.4. Authentication servers settings tab

If you want to authenticate users against an LDAP server, synchronize users from an LDAP server or authenticate users against a Radius server, you have to add all the servers on this tab.

Adding a new LDAP server:

1. Click **+Add** and select **LDAP server**. The new LDAP server properties panel opens on the right side of screen.

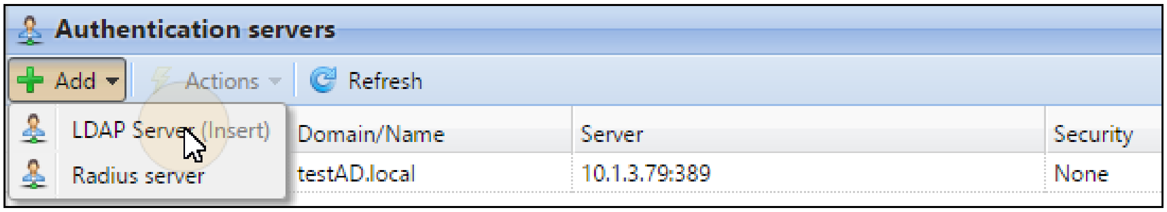


FIGURE 5.13. Adding a new LDAP server on the **Network** settings tab, under **Authentication servers**

2. Enter the LDAP domain.
3. Select the LDAP **Type**. You can select from **Active Directory**, **Novell**, **OpenLDAP** and **Lotus Domino**.

> **NOTICE:** For Active Directory you must select *SSL* in the **Security** field and the **Server** port must be *636*.

4. If you want the communication with the LDAP to be secured, select the **Security** protocol that you want to use.
5. Enter the **Server** IP address or hostname and the communication port.

> **INFO:** For Active Directory you can leave the IP address or hostname empty if you do not know them. The server will then be saved as *Autodiscover*.

6. If you have more addresses related to one LDAP server, you can add them by clicking **Add**.
7. Click **Save**. The LDAP server appears on the list of servers.

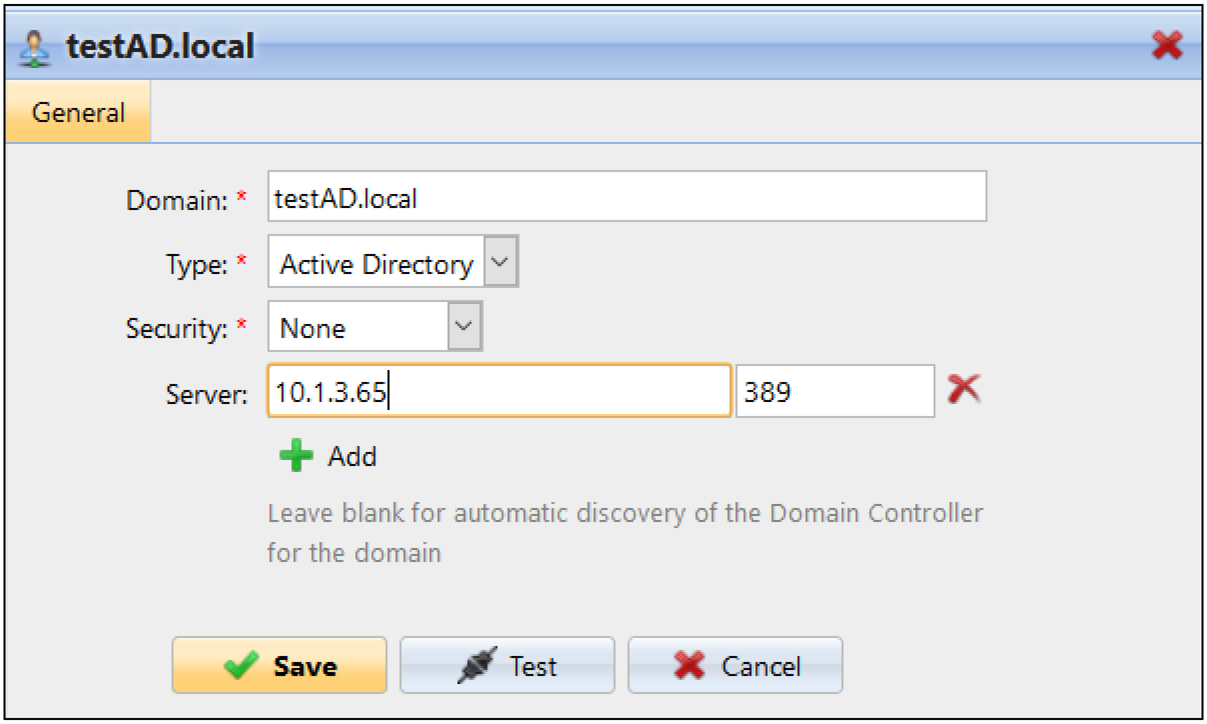


FIGURE 5.14. The LDAP server properties panel

Adding a new Radius server:

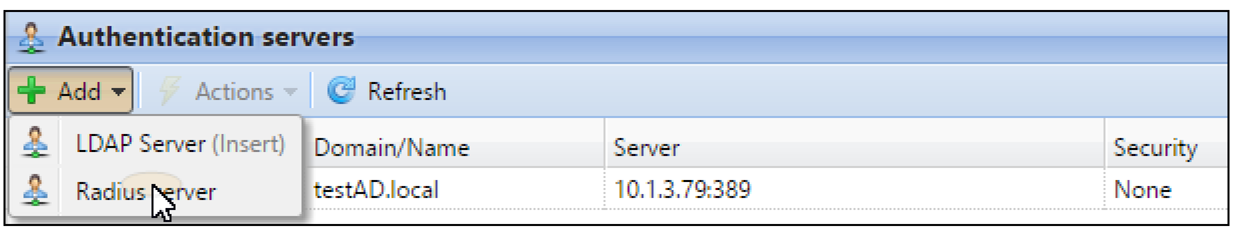


FIGURE 5.15. Adding a new Radius server on the **Network** settings tab, under **Authentication servers**

1. Click **+Add** and select **Radius server**. The new Radius server properties panel opens on the right side of screen.
2. Enter the Radius server **Name**.
3. Enter the **Server** IP address or hostname, the communication port and the Shared secret.
4. If you have more addresses related to one Radius server, you can add them by clicking **Add**.
5. Click **Save**. The Radius server appears on the list of servers.

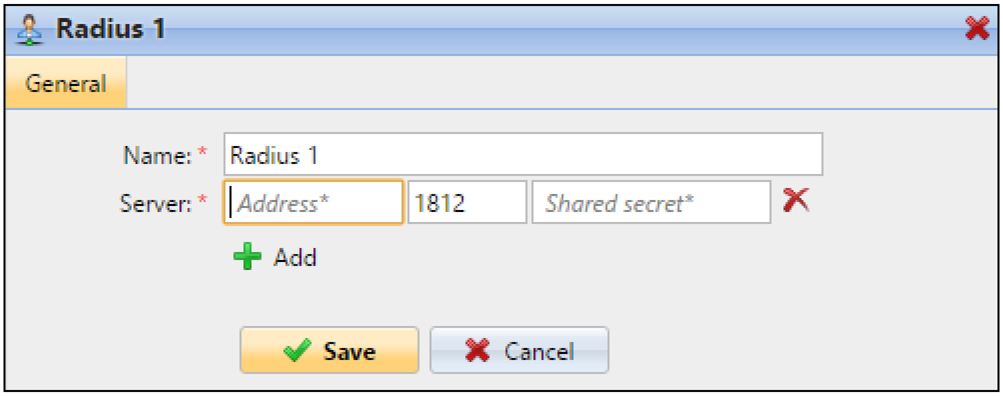


FIGURE 5.16. The Radius server properties panel

INFO: To test connection to a server at any time, right-click on the server and click **Test** on the shortcut menu.

6.5. Task Scheduler settings tab

The **Task Scheduler** settings tab serves as an interface for planning regular tasks in MyQ®. There are seven predefined tasks:

Database and settings backup, **Log backup**, **System health check**, **History deletion**, **Printer Discovery**, **System maintenance** and **User Synchronization**.

Apart from these, you can import projects from CSV files, add scheduled reports and execute external commands.

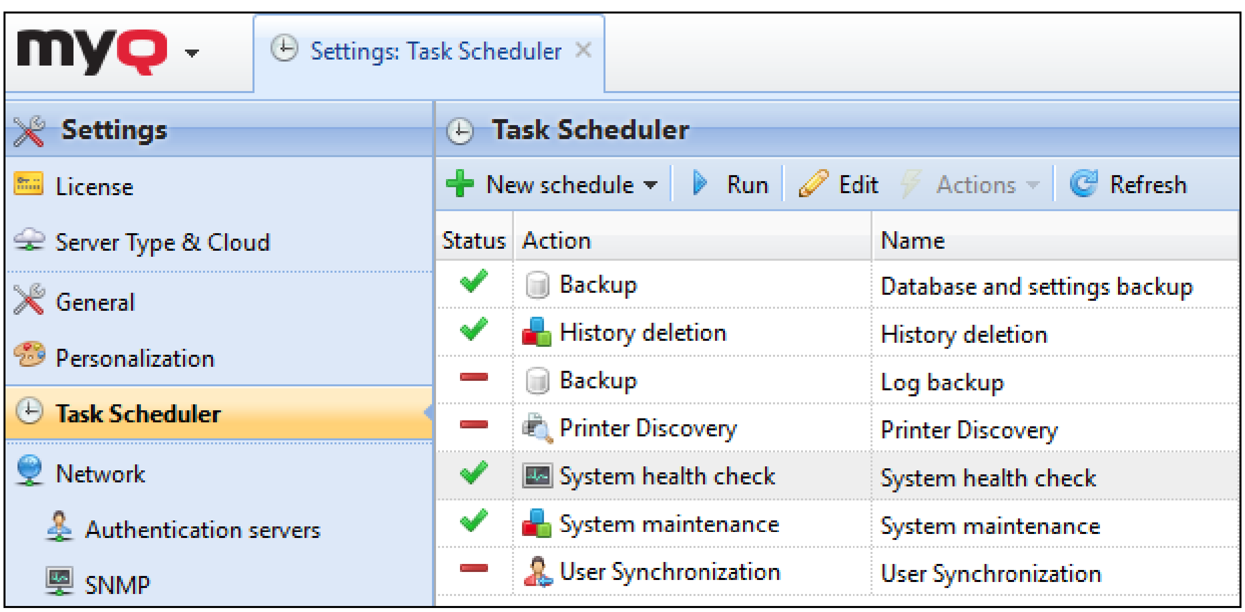


FIGURE 5.17. The Task scheduler settings tab of the MyQ Web Interface

INFO: For more information about history deletion and system maintenance, see *"System Management settings tab"* on page 59. For more information about printer discovery, see *"Discovering printing devices"* on page 76. For more information about user synchronization, see *"Users"* on page 111. For more information about projects, see "Quota, Credit and Project accounting" manual. For more information about reports, see *"Reports "* on page 287.

6.5.1. Running task schedules

To manually run a task schedule, do the following:

1. Select the task schedule that you want to run.
2. Click **Run** on the **Task Scheduler** toolbar.

Or

1. Right-click the task schedule.
2. Click **Run** on the shortcut menu.

To set a task schedule, do the following:

Double-click the task schedule that you want to set (Or right-click it, and then click **Edit** in the actions shortcut menu.). The respective task schedule properties panel opens on the right side of screen.

The task schedule properties panel is divided into four sections:

- In the uppermost section, you can enable, or disable the schedule, enter its **Name** and write its **Description**.
- In the **Schedule** section, you must set a period of **Repetition** for the task run and change the exact time of the task run start.
- In the **Notification** section, you can select to send an email notification. You must also choose if you want to send the notification every time or just in case of an error.
- The bottom section, if present, is particular to the type of task.

After you set the schedule, click **Save**.

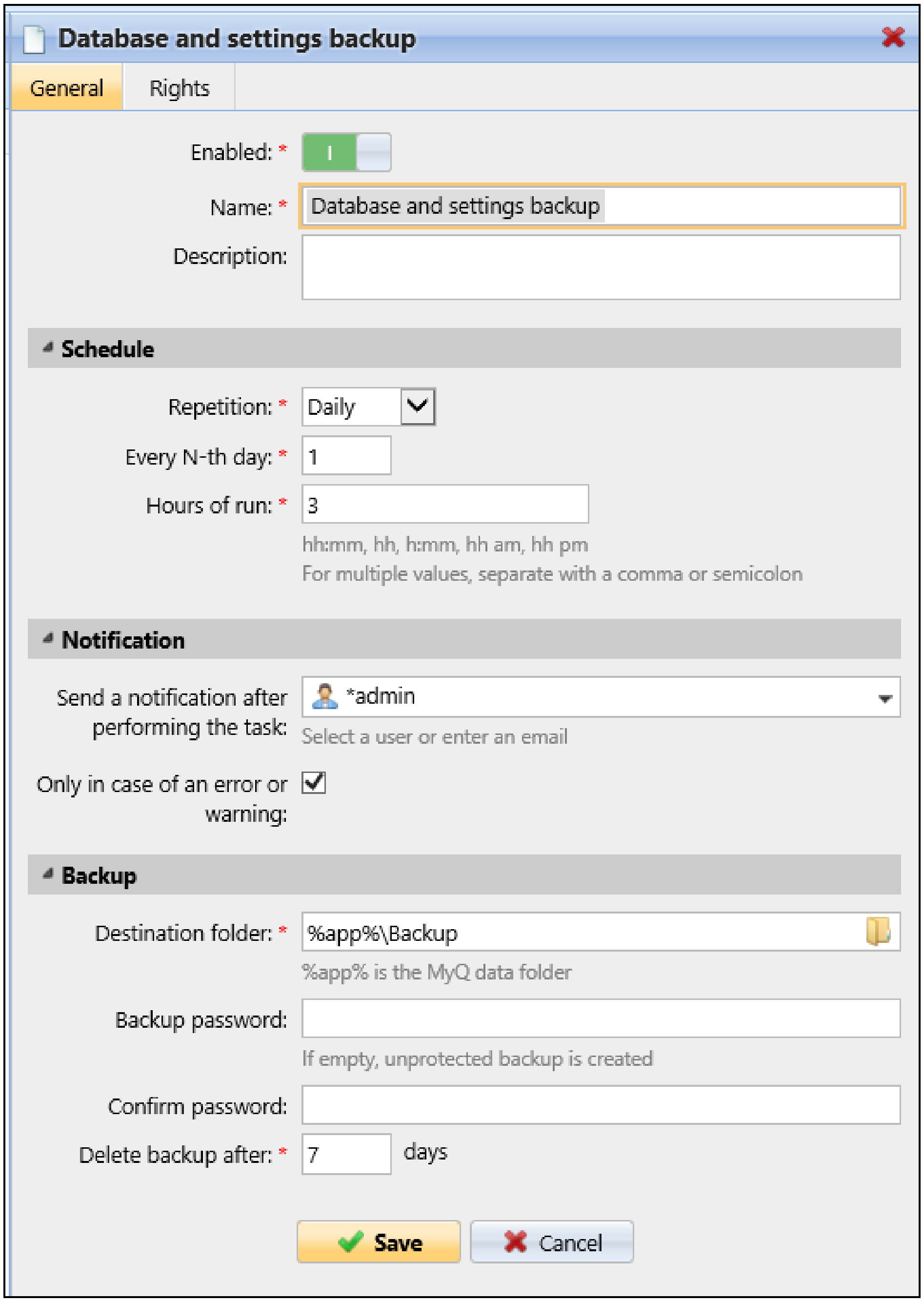


FIGURE 5.18. The Database and settings backup schedule properties panel

6.5.2. Providing users with rights to change task schedules settings

You can provide users with rights to change some task schedules settings themselves.

To provide users with rights to change settings of a task schedule, do the following:

1. Double-click the schedule that you want to set. The respective schedule properties panel opens on the right side of screen.

2. On the bar on the upper-left corner of the panel, click **Rights**. The **Rights** tab opens.

3. Click **+Add user**. The **Select user or group** dialog box appears.

4. Select the user or the group of users that you want to provide with the rights, and then click **OK**.

6.5.3. Automatic database and log backup

There are two automatic backup tasks on the **Task scheduler** tab. The database and settings backup and the log backup. The backup process is automatic. The files are compressed and saved to the **Backup** folder.

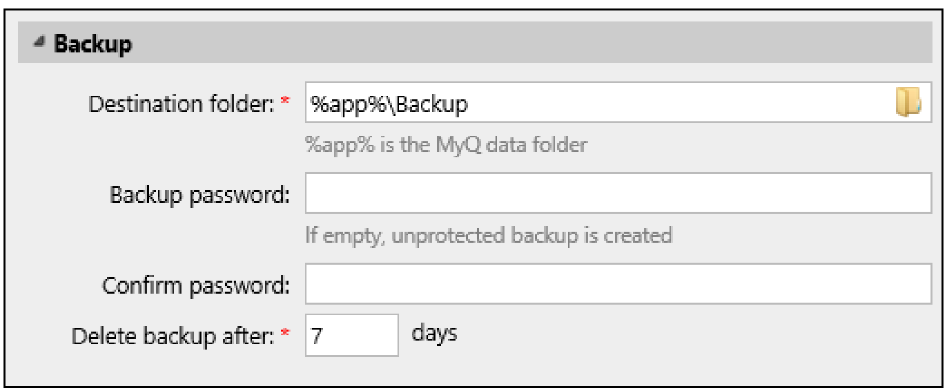


FIGURE 5.19. The **Backup** section of the backup schedule properties panel

Backup settings

- **Destination folder**: The folder where the backup data are stored.

- **Backup Password**: Password protect the backup. If this field is left empty, the created backup is unprotected.

- **Confirm Password**: Confirm the above password.

- **Delete backup after ___ days**: The days after which the data are deleted from MyQ.

6.6. Log & Audit settings tab

On this tab, you can set the **Log notifier** feature, which enables sending notifications about selected log events to the administrator and/or any number of MyQ users. The notifications can be sent via email or they can be sent to **Windows Event Viewer**.

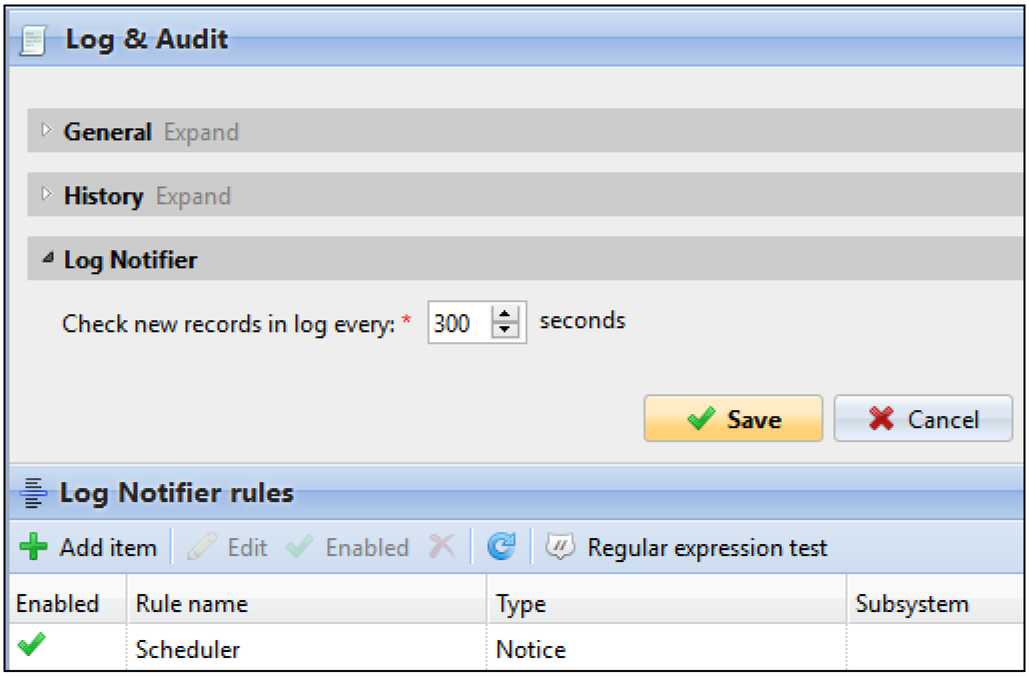


FIGURE 5.20. The **Log & Audit** settings tab of the MyQ Web Interface

General - Log debug level messages

If you select the **Log debug level messages** option, the system will generate more information for troubleshooting. The information will be shown in the MyQ Log.

> **NOTICE:** This feature will impact your system's performance. Therefore, we recommend you to enable it only in case of a system malfunction or if it is requested by MyQ support.

History

Here you can set when the logs should be deleted.

Log Notifier

The notifications and their destinations are both specified by log notifier rules.

Under **Log Notifier**, you can set the period after which the log is checked for new events in the **Check new records in log every:** ... **seconds** text box (*300* by default).

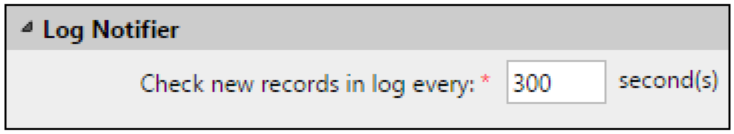


FIGURE 5.21. Setting of the period after which the log is checked

Management of the Log Notifier Rules

Adding new Log Notifier rules

To add a new rule, click **+Add item** at the upper-left corner of the **Log Notifier** rules widget. The properties panel of the new rule opens on the right side of the tab. On the tab, edit and save the rule.

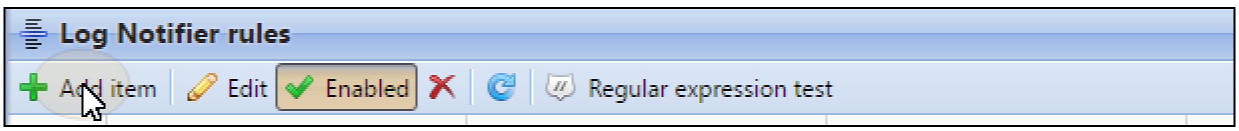


FIGURE 5.22. Adding a new Log Notifier rule

Editing a Log Notifier rule

1. To open the editing options of a rule, double-click the rule (or right-click the rule, and then click **Edit** on the shortcut menu). The following settings can be changed:
    - **Enabled**: activate, deactivate the rule
    - **Rule name**: name of the rule
    - **Type**: one or more of the event types (*Info, Warning, Error, Notice, Debug, Critical*)
    - **Subsystem**: subsystems of the MyQ application (*Terminal, SMTP Server, CLI* etc.)
    - **Context**: specific part of the subsystem
    - **Text**: text of the log event message; you can use Regular expressions to search for specific patterns

    After you set the notification rule, click **Save**. The rule is saved and you can select its destinations.

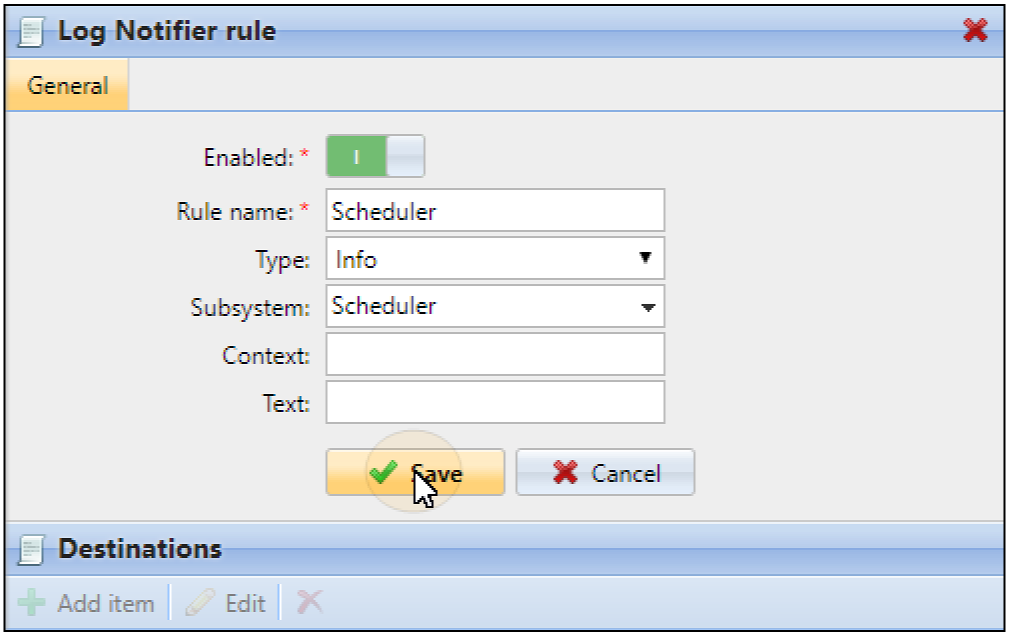


FIGURE 5.23. Editing a Log Notifier rule

2. To add the destination, click **+Add item** under **Destinations**.

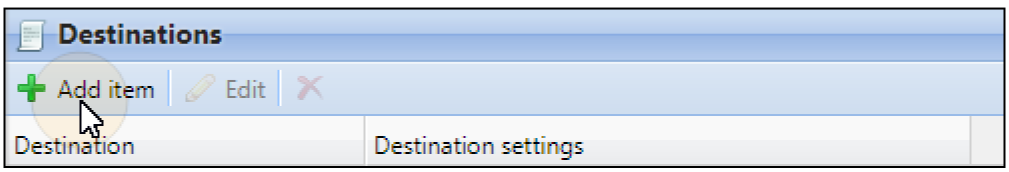


FIGURE 5.24. Destinations options.

3. You can select between two destination options: **E-mail** and **Windows Event Log**. If you select the **E-mail** destination, you need to add one or more recipients; you can either select them from the list of MyQ users in the **Recipients** combo-box or directly type the addresses there. After you set the destination, click **Save**. The new rule is displayed on the tab.

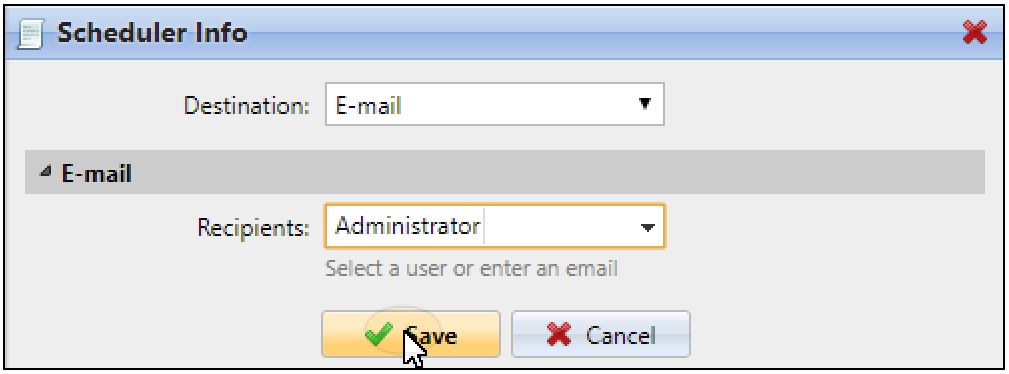


FIGURE 5.25. Saving an email destination.

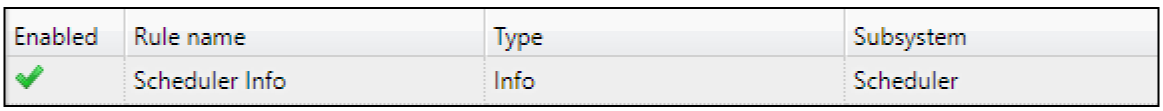


FIGURE 5.26. The rule is displayed on the tab.

Enabling Log Notifier rules

1. Right-click the rule.

2. Click **Enabled** (or **Disabled**) on the shortcut menu.

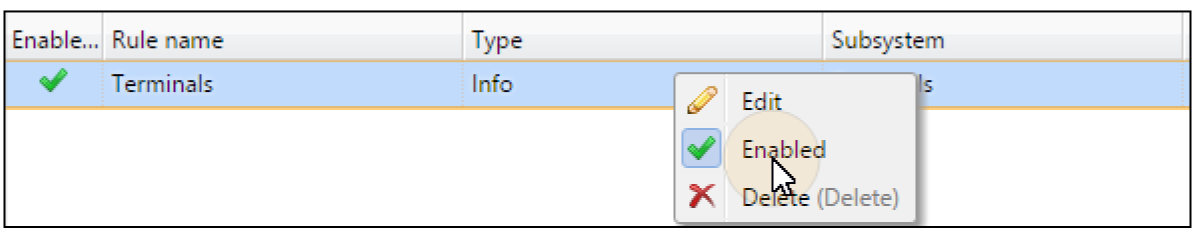


FIGURE 5.27. Disabling a Log Notifier rule

6.7. System Management settings tab

On the **System Management** settings tab, you can change the settings of the MyQ history, set the maximum size of files that can be uploaded on the MyQ Web Interface, reset MyQ components to apply settings previously made on other tabs, and also delete data from the MyQ database.

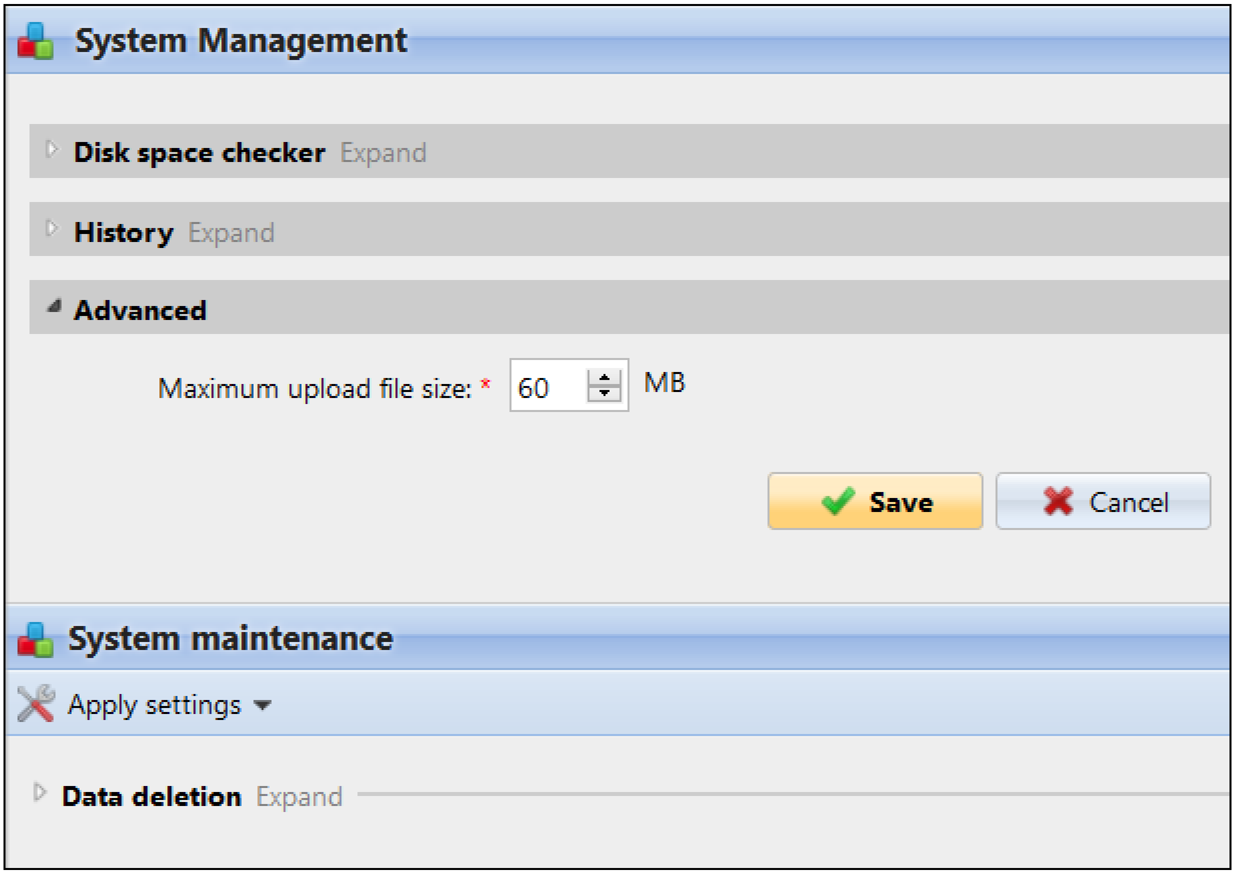


FIGURE 5.28. The **System Management** settings tab of the MyQ Web Interface

Changing MyQ History settings

In the **History** section, you can change the periods after which data stored on the MyQ server is deleted. You can set time periods for the following data:

Delete jobs older than: Jobs remain on the MyQ server for the period set here. Older jobs (except for Favorite jobs) are deleted and cannot be printed. Favorite jobs stay on the server until they are manually deleted by the user or by the MyQ administrator.

Delete local scans older than: Local scans (the scans stored on the MyQ server) remain on the MyQ server for the period set here. Older local scans are deleted and cannot be downloaded.

Delete history older than: This setting determines the time period for storing data of user sessions, alerts on printing devices and counter history of the printing devices. Older data are deleted from the MyQ database and cannot be used in MyQ reports.

Delete archived reports older than: Reports are archived for the period set here. Older reports are deleted.

- To change the values, enter new values to the particular text box, and then click **Save**.

NOTICE: After the user sessions are deleted, all data in reports preceding the set period are deleted as well and are not contained in reports anymore. The data cannot be retrieved. The same applies to log data.

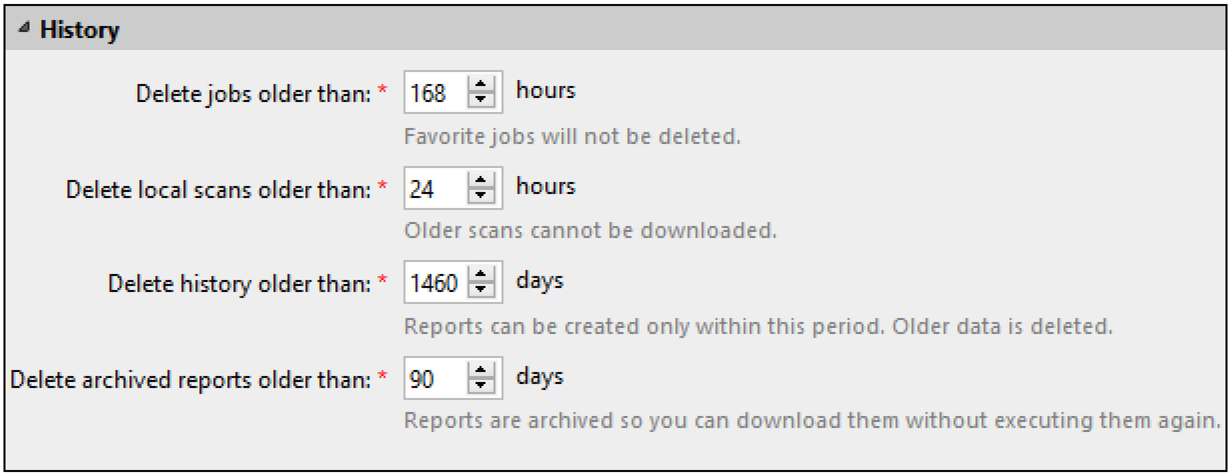


FIGURE 5.29. MyQ history options on the **System Management** settings tab

Disk space checker

The disk space checker protects the system against failure caused by insufficient disk space. You can set two levels of alert:

- **Warning level**: If the disk space reaches this level, the administrator gets an alert email message.
- **Critical level**: If the disk space reaches this level, the administrator gets an alert email message and the MyQ services are automatically stopped to prevent corruption of the MyQ databases.

Advanced

In the **Advanced** section, you can set the maximum size of files that can be uploaded on the MyQ Web Interface, such as print jobs uploaded on users' accounts or custom logos.

System maintenance

In the **System maintenance** section, you can reset MyQ components to apply settings previously made on other tabs, delete all users without a session and permanently remove inactive users, printers, groups and user data from the MyQ database.

Applying changes of the MyQ server

Some changes of the MyQ server require a reset of some of the server's components. When you save these changes, the system proposes to automatically perform the reset. If you decide to skip this action, you need to reset the components later.

Via the **Apply Settings** button, you can reset the components at any time. After you click the button, click a component that you want to reset and the settings will be applied without further notice. For **Reset all terminals** you must click **Yes** in a next **Warning** window.

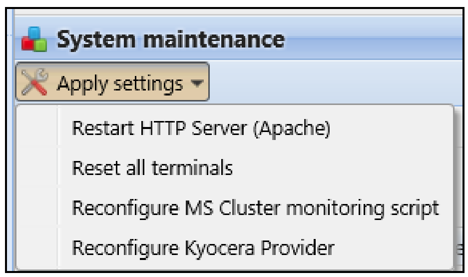


FIGURE 5.30. Available settings to Apply

Deleting data from the MyQ database

The delete/remove buttons perform the following actions:

Delete users: Deletes all users without user sessions.

Deleted inactive users and groups: Removes all inactive users and all groups with no active users from the MyQ database.

Deleted printers: Removes all printers which are deleted and have never been activated from the MyQ database.

User data: User Sessions, Jobs, Groups, Users, Vouchers: Removes all user related data from the MyQ database.

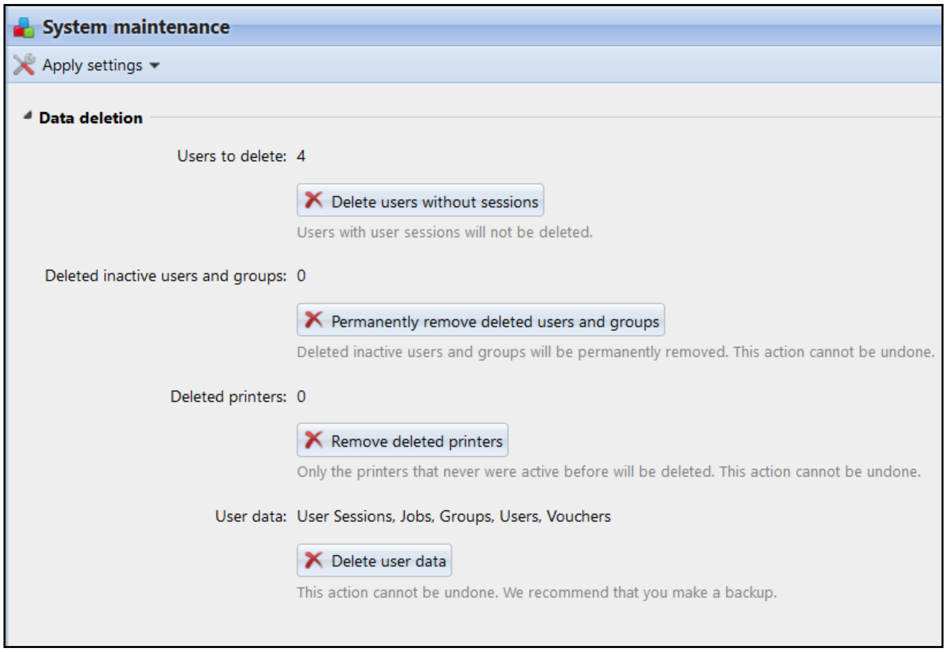


FIGURE 5.31. Data deletion options

NOTICE: These actions cannot be undone. We recommend you backup your data before performing any of them.

7. Licenses

There are two ways of licensing in MyQ. The one that has been used so far (old licensing model), with separate keys for each license, and the new licensing model -in use since MyQ Server 8.0 (patch 4)-, that introduced the use of an **Installation Key** per MyQ setup. Further details about the new licensing model can be found in the *MyQ Licensing Quick Guide*, available in the MyQ Community portal.

This topic discusses two main subjects:

- adding , activating and deleting licenses
- extending support licenses

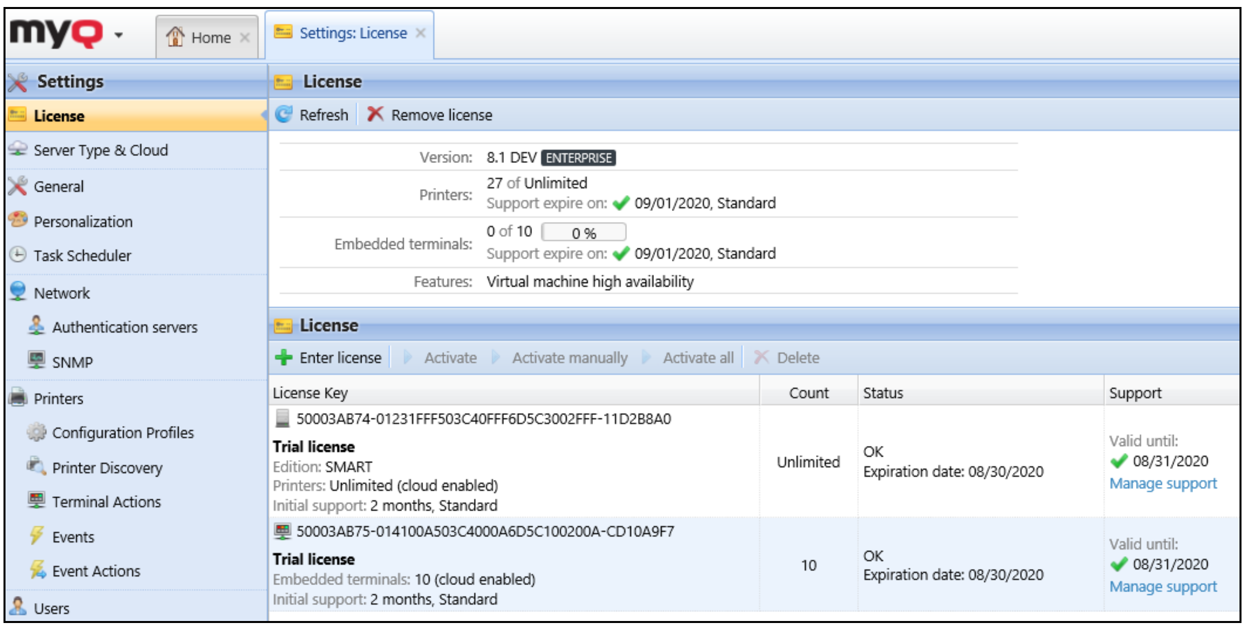


FIGURE 6.1. **License** settings tab

7.1. Adding, activating and deleting main licenses

You can add new licenses either on the **Home** screen during the initial setup of MyQ, or anytime on the **License** settings tab.

After activation, the license is linked with the hardware configuration of the server where MyQ is installed. If the configuration changes (for example after you reinstall MyQ on a different server or after you change any of the hardware components of the server), the license becomes invalid and you have to reactivate it within seven days.

The total number of devices allowed to be activated at the same time is equal to the number allowed by your purchased licenses (For example: a license allowing ten printing devices + a license allowing one printing device + a license allowing five printing devices = sixteen printing devices allowed to be activated.).

Main licenses include 1-month of Software Assurance that expires on the 1st of the upcoming month.

> **NOTICE:** Having licenses for 40 printing devices automatically allows an unlimited number of printing devices to be activated at the same time on the server. This does not apply to embedded terminal licenses.

7.1.1. Adding licenses on the Home screen

The first time you set up the MyQ system, you can add new licenses on the **Home** screen, in the **Enter license** section, under the **Quick Setup Guide**. For more information about this option, see *"License"* on page 33.

7.1.2. Adding licenses on the License settings tab

To add licenses:

1. On the **License** settings tab click **+Enter license**. The **Enter license** box appears, where you can add your license keys or **Installation Keys**.

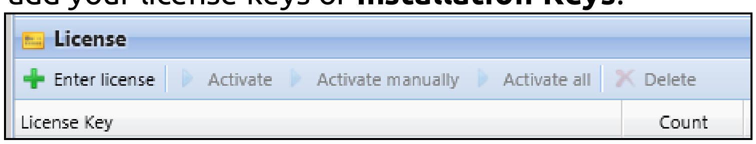


FIGURE 6.2. Adding license on the **License** section of the **License** settings tab

> **INFO:** If there are no licenses added to MyQ, you can click **Get MyQ ENTERPRISE trial license** to obtain a trial license. You automatically receive a two-month trial license for an unlimited number of printers and a two- month license for ten embedded terminals. These licenses are automatically activated.

> **NOTICE:** Licenses for support have to be assigned to the corresponding server license. If you have special support licenses, don't enter them here. For information about how to enter these licenses, see *"Extending support licenses"* on page 68.

2. In this dialog box, enter the license or Installation keys that you want to add - one per row, and then click **Next**.

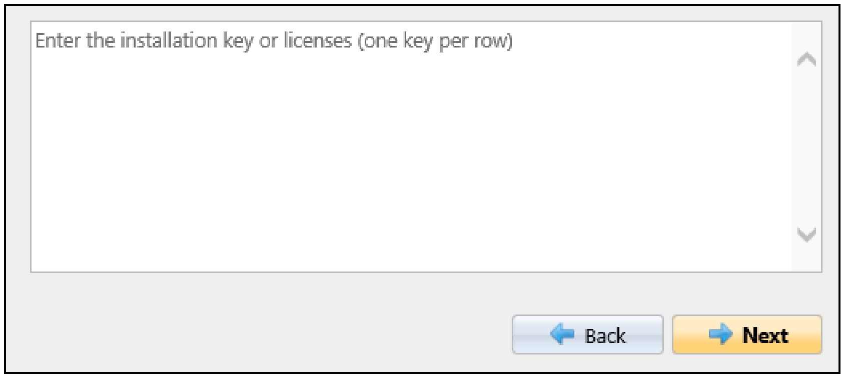


FIGURE 6.3. Entering licenses in the **Enter license** dialog box

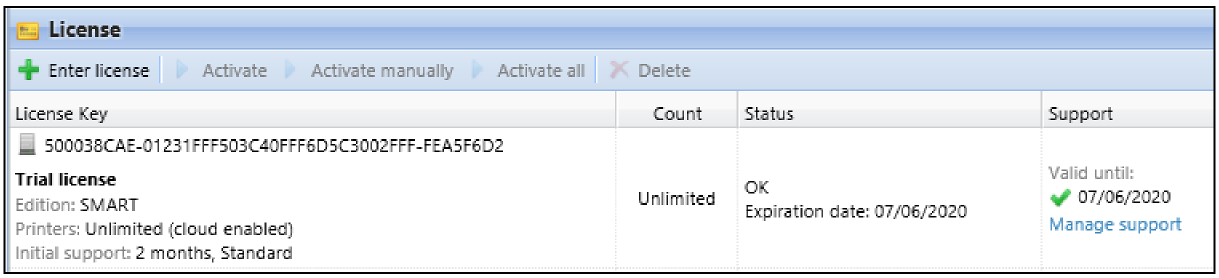


FIGURE 6.4. You can see the newly added licenses on the list of licenses on the **License** settings tab, under **License**

INFO: The licenses have to be activated by the date shown in the **"OK, Activate by DD/MM/YYYY"** message on the license status displayed in the **License** section. Up to this date, you can use them without activation. **Installation Keys** are activated as soon as they are added.

7.1.3. Activating licenses

Activate a selected license online:

The HTTP Proxy Server setting for license activation is not supported for License Keys generated on the MyQ X Partner portal. Manual (offline) activation must be used instead.

Installation Keys are automatically activated as soon as they are added (if connected to the Internet).

To manually activate a license:

If you are using the old licensing model (with license keys):

1. Generate the MyQ-helpdesk .zip file. For information about how to do this, see *"Generate data for support"* on page 35.

2. Send a request for an activation key to license@myq-solution.com with the MyQ-helpdesk.zip file attached. You will get an email response with the generated activation key.

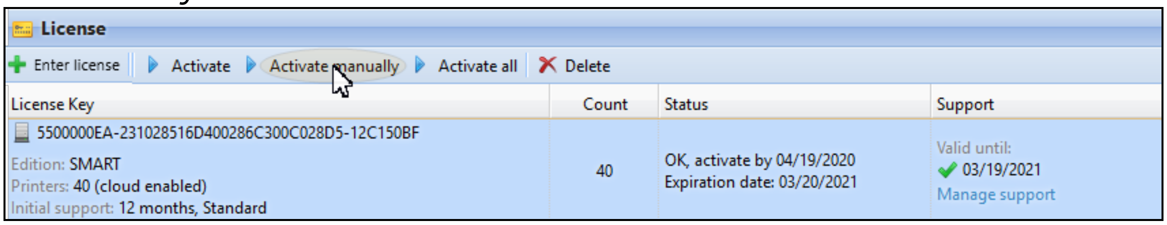


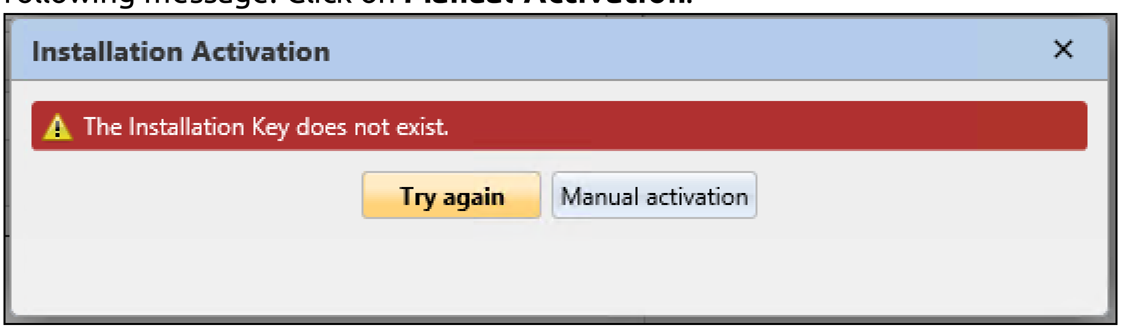
FIGURE 6.5. Manually activating licenses

3. Go to the **License** settings tab. Under **License**, click **Activate manually**. (Or right-click the license, and then click **Activate manually** on the shortcut menu.) A dialog box for entering the activation key appears.

4. In the dialog box, enter the received activation key, and then click **OK**.

If you are using the new licensing model (with Installation Keys):

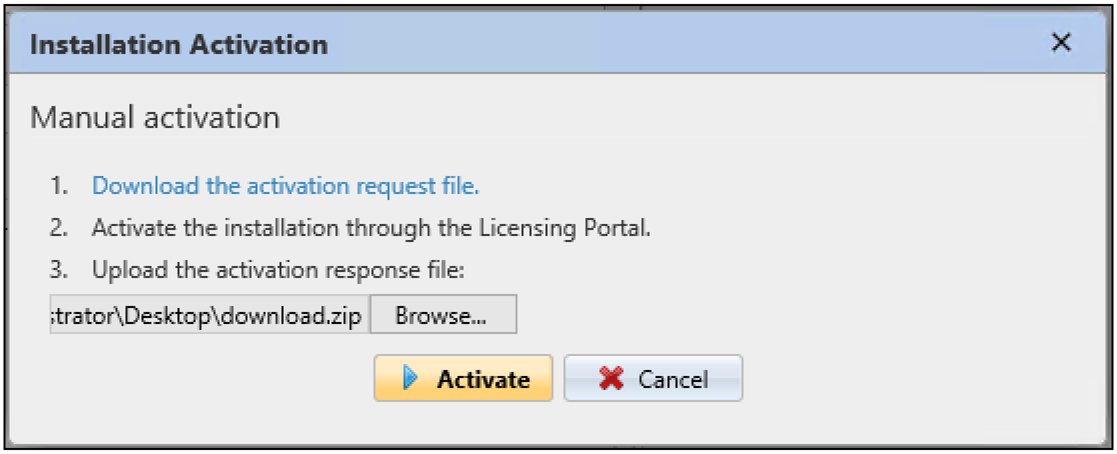
1. Go to the MyQ Web Administrator interface, in **MyQ, Settings, Licenses**. Add your Installation Key and click **Next**. The online activation fails and you get the following message. Click on **Manual Activation**.



2. In the newly opened window, click on **Download the activation request file**

3. Upload the file in the MyQ X Partner portal and download the activation response file (more info in the *MyQ Licensing Quick Guide).*

4. Go back to the MyQ Web Administrator interface, upload the activation response file and click **Activate**



7.1.4. Deleting licenses

To delete a license:

1. Select the license that you want to delete.

2. On the **License** settings tab, under **License**, click **Delete**. (Or right-click the license, and then click **Delete** on the shortcut menu.)

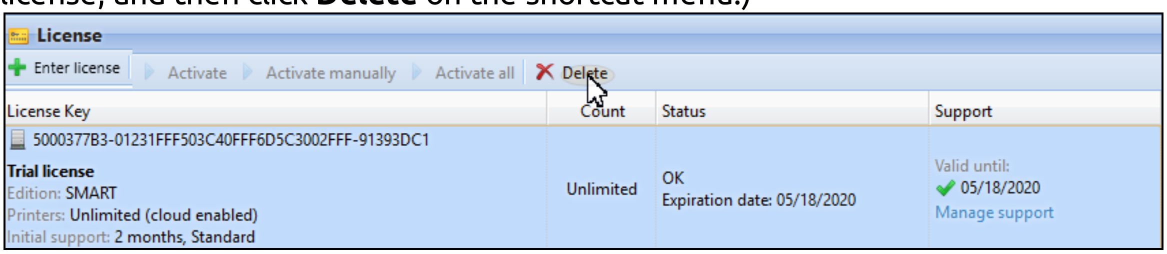


FIGURE 6.6. Deleting licenses on the **Licenses** settings tab

7.2. Extending support licenses

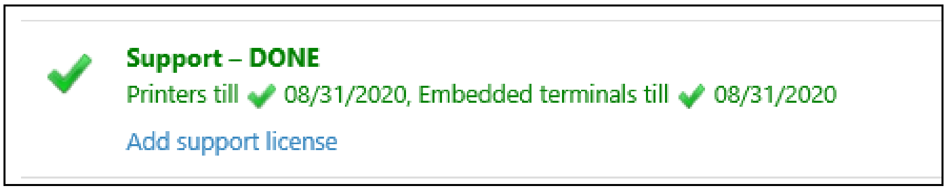
You can extend the support period by assigning support license to the particular main license. This can be done at any time, even before your current support period expires. In this case, the service is extended from the last day of validity of the current support.

The licenses can be extended either on the **Home** screen or on the **License** settings tab.

7.2.1. Extending support licenses on the Home screen

To extend a support license on the Home screen, do the following:

- On the **Home** screen, under **Support**, click **+ Add Support license**. The **Add support license** dialog box appears. You have two options of activating the license here. For information about these options and about further steps to extend the licenses, see *"Automatic and manual activation of support licenses"* on the facing page.



7.2.2. Extending support licenses on the License settings tab

To extend a support license on the License settings tab, do the following:

1. On the **License** settings tab, under **License**, click **Manage Support**. The license properties panel opens on the right side of screen.

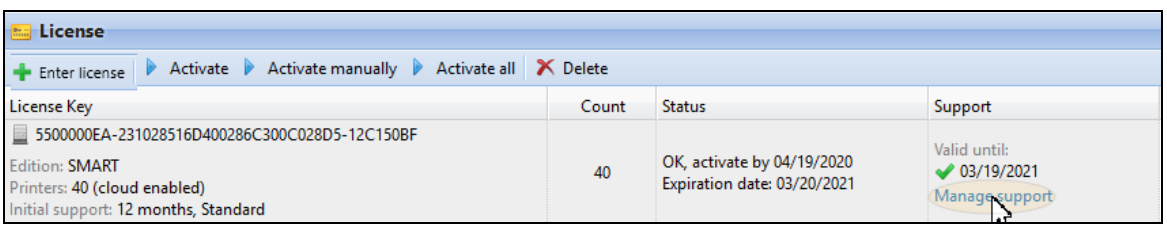


FIGURE 6.7. Extending support licenses on the **License** settings tab

2. On the panel, click **+Add Support license**. The **Add support license** dialog box appears. You have two options of activating the license here. For information about these options and about further steps to extend the licenses, see *"Automatic and manual activation of support licenses"* below.

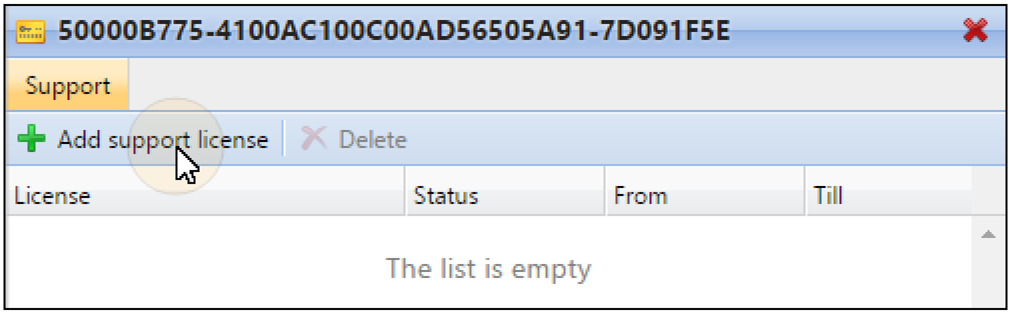


FIGURE 6.8. Adding support license on the **License** properties panel

7.2.3. Automatic and manual activation of support licenses

1. If you are connected to the internet, select the **Activate via internet** option on the **Add support license** dialog box, enter the support license number, and then click **OK**.

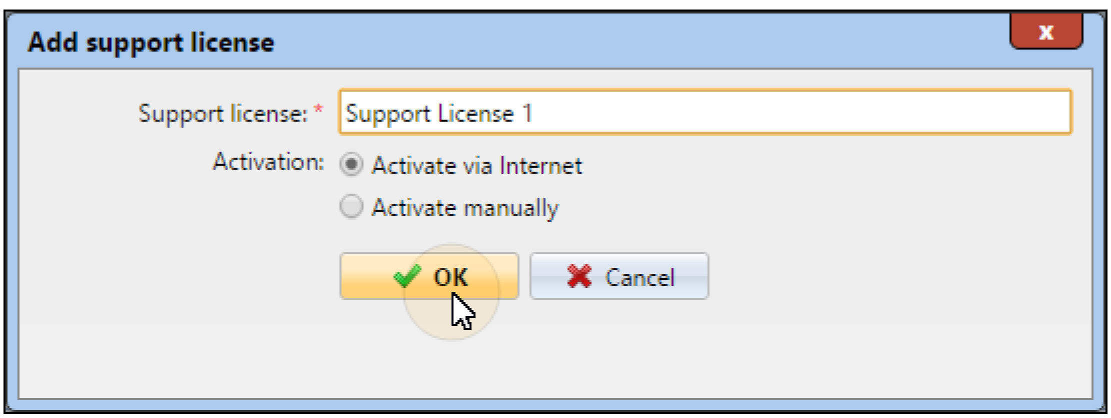


FIGURE 6.9. The **Add support license** dialog box

2. If you are not connected to the internet, you need to activate the license manually: select the **Activate manually** option on the **Add support license** dialog box, enter the support license number, enter an activation key, and then click **OK**.

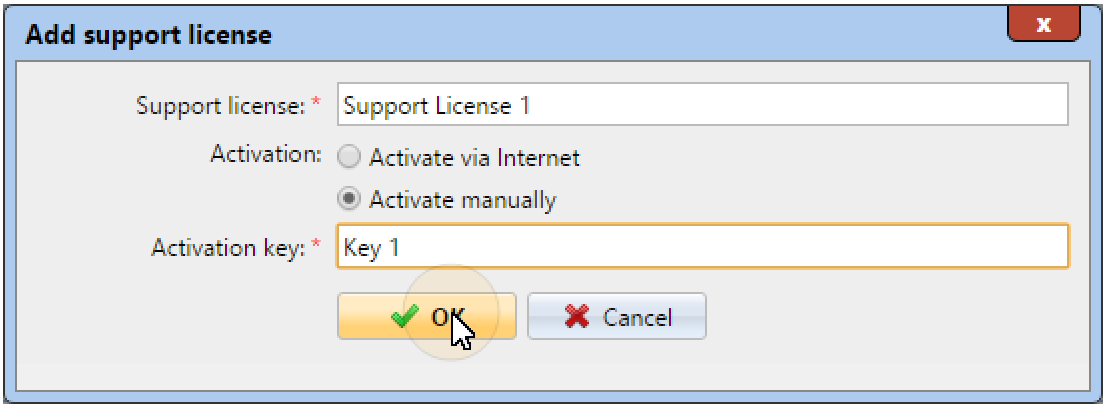


FIGURE 6.10. Entering the support license and the license key on the **Add support license** dialog box

To receive the activation key for manual activation:

1. Generate the MyQ-helpdesk.zip file.

2. Send a request for an activation key to *license@myq-solution.com* with the MyQ-helpdesk.zip file attached. You will get an email response with the generated activation key.

NOTICE: If you are using the new licensing model and want to manually activate your Installation Key, please check the *MyQ Licensing Quick Guide* in the MyQ Community portal.

7.3. VMHA License

Normally, the hardware signature of the server hosting MyQ is occasionally verified to make sure that the license is still installed on the same server and isn't misused. In certain scenarios, the underlying hardware may change and so a license reset is required to re-activate the license. If the hardware changes often (which is common when the server is hosted in a virtual environment), the Virtual Machine High Availability (VMHA) feature may be required.

The VMHA license is included free of charge in MyQ Enterprise and MyQ Ultimate 8.0+ licenses.

For the VHMA feature to function, a domain environment is mandatory - the server running MyQ must be a member of a domain. For MyQ installed in an MS Azure environment, a domain is not required. Changing the domain or migrating to a completely different server will still require a license reset.

To verify that the VHMA feature is available, go to **MyQ, Settings, License**.

With old license keys, once the VMHA license is registered and activated, you can enable the VMHA feature in **MyQ, Settings, Network**. Once enabled, the license verification mechanism will no longer check for changes in the hardware when checking the HW license signature key.

With the new licensing model, with installation keys, VHMA is enabled by default in a Print Server or Central Server setting. If you are using Site servers, you have to enable the feature in each Site server.

8. Printing Devices

This topic discusses one of the key functions of MyQ — setup and management of printing devices. It covers the following subjects:

- Overview, adding, activating and deleting printing devices: List of printing devices, Manually adding printing devices, Discovering printing devices, Activating and deactivating printing devices, Deleting and undeleting printing devices
- Individual device setting, creating groups of printing devices and exporting the list of printing devices: Editing printing devices, Groups of printing devices, Exporting printing devices
- Monitoring of offline and local printing devices: Monitoring network printers in offline mode, Local printing device monitoring
- Sending email notifications of printing device alerts: Printer Events
- Creating and assigning SNMP profiles: SNMP profiles

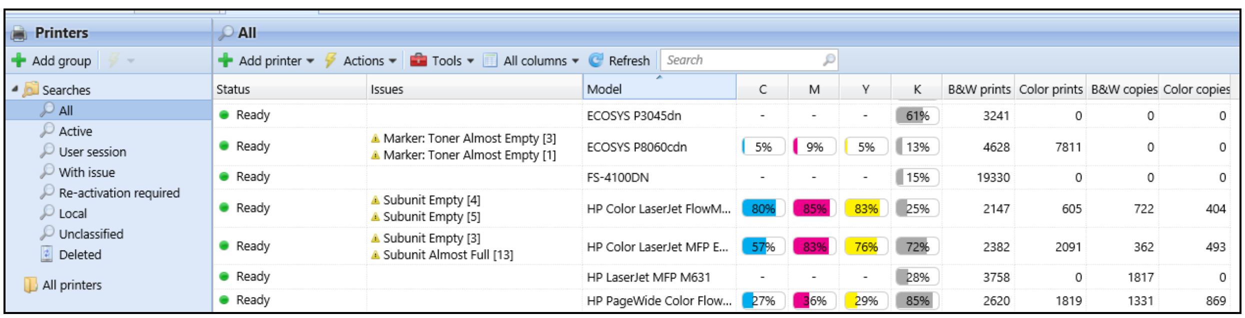


FIGURE 7.1. The **Printers** main tab

8.1. List of printing devices

On the **Printers** main tab, you can see printing devices and information about them. With the **All** search option selected, you see all printing devices that are currently in the system. Apart from this option, you can select from the following:

- **Active** - select to display only active printing devices
- **User Session** - select to display only printing devices that are currently in use
- **With issue** - select to display only printing devices with a reported issue, (these printers are also listed on the **Home** page)
- **Re-activation required** - select to display the printing devices that must be activated again
- **Local** - select to display only locally connected printing devices (USB, LPT)
- **Unclassified** - select to display only printing devices that do not belong to any group
- **Deleted** - select to display only deleted printing devices

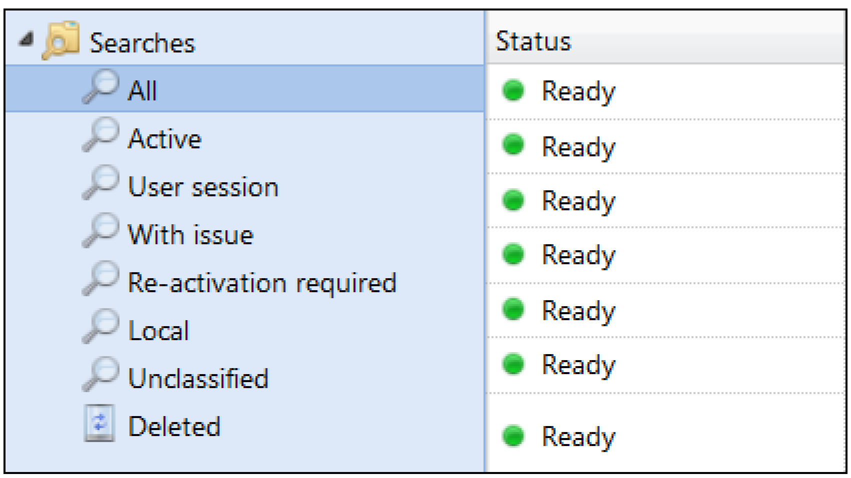


FIGURE 7.2. List of printing devices on the **Printers** main tab

8.2. Manually adding printing devices

To manually add a device, do the following:

1. On the **Printers** main tab, click **+Add printer**. A drop-down box appears.
2. In this drop-down box, click **+Add printer**. The new printing device properties panel opens on the right side of screen.
3. On the panel, enter the device name and IP address, and then click **Save**.

8.3. Configuration profiles

A configuration profile is used for multiple printers configuration. It is where you can add an installation package and attach it to printers to equip them with embedded terminals..

INFO: We recommend to create a configuration profile per printer type if you have different printer types.

Cloning

For a quicker setup you can clone your configuration profiles. With minimal editing you can then create a new profile. Printers will not be cloned to this new configuration profile. Go to **MyQ, Settings, Configuration Profiles**, select a configuration profile and click **Clone** on the menu bar (or right click and clone).

You need the configuration profiles when you do your printer discovery.

The following settings can be configured:

Name	It is mandatory to give the profile a name.
Price List	Select a price list from the drop-down list. For more information on price lists, see: *"Price List"* on page 280
Fax module	If selected, all printed faxes are charged on the FAX user account. It is available only for devices with the FAX option. Select only if the device has a fax module.
Terminal	Select a **Terminal type** from the drop-down. If the type you want is missing, click **Install terminal package**, then select it from the drop-down and set the **Login methods**. • **Copier operation panel idle time**: time for idle logout (mandatory field). • **Automatic configuration**: leave this option unchecked if you want to configure the device manually

Printer Credentials	The credentials are used to configure the printer(s) attached to the profile. You can override the defaults with the Printer Credentials in the properties of each printer.
Network	Here you can add an SNMP profile: see *"SNMP profiles"* on page 105. And if the **Network** should use the *IP address* or the *Hostname*.

Extra options

The following options are also available, but it depends on brand and model if they will function on your printer.

- Guest Account
- Guest screen
- Local administration PIN
- Language selection
- Display numeric keypad
- ID Card reader type

NOTICE: New available functionality for a Configuration profile will be included in updated terminal packages. We recommend to update your terminal packages regularly.

INFO: You can find further options and details in the MyQ Embedded terminal manuals.

8.4. Discovering printing devices

On the **Printer discovery** settings tab, you can create and run print discoveries to search for all network printing devices within a defined IP range of your company's network. You can create multiple discoveries for different subnets.

Automated printer discovery

It is possible to add an Action to your printer discovery. In that way you can add a Configuration profile to your printer discovery, or select to activate the discovered printers when you Run the printer discovery.

To add a print discovery, do the following:

1. On the **Home** tab click **Discover printers** in the **Quick Setup Guide** section.

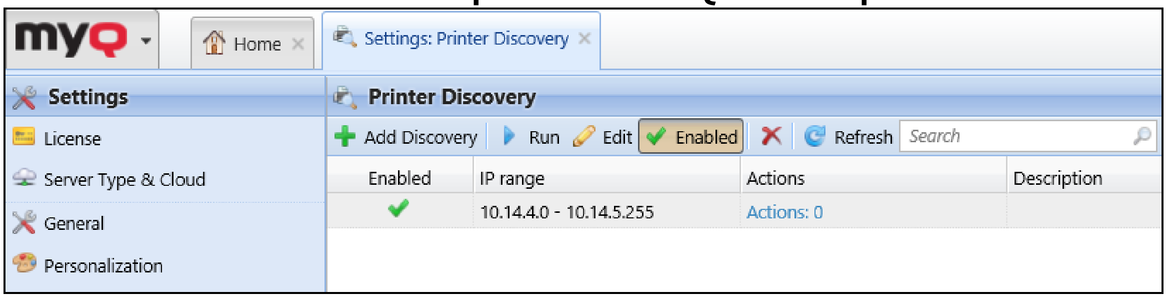


FIGURE 7.3. Adding a printer discovery on the **Printer Discovery** settings tab

2. On this tab, click **Add discovery**. The new printer discovery properties panel opens.

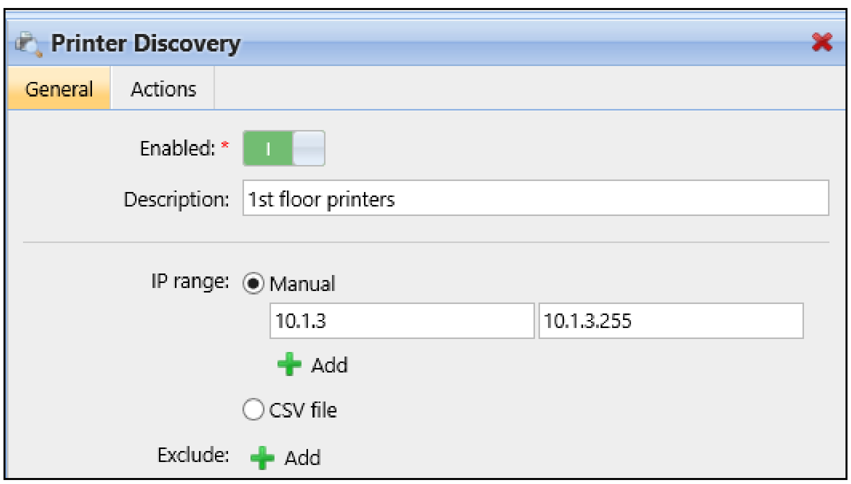


FIGURE 7.4. **Printer discovery** properties panel

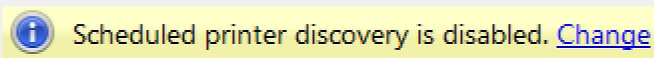
3. On the panel, you can change the **General** discovery configuration. see *"Printer discovery general configuration"* on the next page.

4. You can also set special **Actions** to be performed during the discovery, see: *"Printer discovery actions"* on page 81.

INFO: If you want to automatically embed your terminals after printer discovery, we suggest that you select **Activate** in the **First run actions** section and set a configuration profile with your printer type as **Set configuration profile** in the **Every run actions** section.

5. Click **Save**. The new printer discovery appears on the list on the **Printer Discovery** settings tab.

NOTICE: After activation you get a notice that your printer discovery schedule is not activated. Click **Change** and activate it to make the message disappear.



INFO: The process of printer replacement (same IP-address, but different device) is automated.

To run a discovery and add printing devices:

1. On the **Printer Discovery** settings tab, select the printer discovery that you want to use, and then click **Run**. The **Discovering** tab with a list of discovered printing devices opens. You can choose to add either all of the discovered devices or just a selection of them:

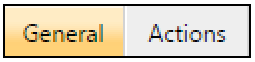
   a. If you want to add all discovered devices, click **+Add to MyQ**, and then click **+Add all** in the drop-down. You can see the added printing devices on the **Printers** main tab.

   b. If you want to add selected devices, select the devices that you want to add, click **+Add to MyQ**, and then click **+Add selected**. You can see the added printing devices on the **Printers** main tab.

8.4.1. Printer discovery general configuration

The basic configuration options are displayed in the table below:

INFO: The options mentioned in the following table are basic and commonly used options of the printer discovery. Options that are not mentioned here are connected with advanced MyQ features. You can find information about those options in the MyQ Embedded terminal manuals.



Enabled:	If you enable the discovery, it is included in the scheduled run of print discoveries.
Description:	Here you can add your own description of the discovery.
IP range:	• MyQ automatically detects the IP range from the IP address of the server. • If you want to use a different IP range, you can either manually change it or import it from a CSV file. • You can add additional IP ranges by clicking **+Add** under **IP range**. • You can delete IP ranges by clicking the delete button. • You can exclude particular IP addresses by clicking **+Add** next to **Exclude**.
Save the printer address as:	Here you can select if you want to save the printing device address as an *IP address* a *Hostname* or a *FQDN*.

Initiated by terminal:	Check this box when you have Java based terminals that need to be setup. Java based terminals can be installed and configured on the printer manually without a need to create a printer in MyQ and execute Remote Setup. When an embedded terminal connects to MyQ and there is no printer with the same IP address, MyQ will execute a Printer Discovery whose IP address range matches the IP address of the terminal.
SNMP:	Here you can set the SNMP timeout period in milliseconds. This setting determines how long the MyQ system waits for a response from a printing device.

<table>
<tr>
<td>Name template:</td>
<td>You can create a name template for each of the discovered printing devices; multiple parameters can be used to compose the name of the new device:

%model%: Model of the printing device.
%ipByte4%: The last byte of the device's IP address.
%sn%: Serial number of the printing device.
%id%: ID of the printing device in the MyQ database.

NOTICE: If the printer name template contains the %id% parameter and you run discovery and add the same printer again, the name will not be updated.

%hostname%: This parameter corresponds to the hostname resolved by DNS server.
%snmpHostname%: This parameter corresponds to the hostname of the printing device set in the MIB table. The value of this parameter is obtained via SNMP protocol within the discovery of each printing device.
%FQDN%: Fully Qualified Domain Name of the printer

If you select the CSV file option, you must enter the name of the CSV file as IP address/Hostname or serial number;printer name. You must also set the content of the First column in table, being either IP address, Hostname or Serial number.</td>
</tr>
</table>

8.4.2. Printer discovery actions

INFO: The actions mentioned in the following table are basic actions that are commonly performed during printer discoveries.

You can add multiple filters for performing discovery actions: every filter specifies on what type of printers the actions will be performed and which actions will be included.

- To add a new filter, click **+Add Action**. The **Actions** panel opens.

Filter:	
	Here you can specify the printing device models or the types of devices on which this action is performed during the discovery. • Enter the model on which you want to perform the action. If you want to add more models, you have to separate them by commas. • You can also select types of devices: color or B&W devices and distinguish between copiers or all.
Every run actions	
Add to queue:	Here you can select one or more queues where the device will be automatically added to. For more information about print queues, see *"Queues "* on page 173.
Set configuration profile	Here you can select a configuration profile from the drop-down or create a new one by selecting **+Add new**. It gives you the option to install a terminal package and set the login method for the printers in the discovery. See: *"Configuration profiles"* on page 75.
Add printer to group:	Here you can select a group where the device will be automatically added. For more information about print groups, see *"Groups of printing devices"* on page 96.
Remove current groups:	If you select this option, the device is removed from all of its current groups.

Location	Here you can set the location of the printing device; you have three options as to how to do this: • You can manually define the location by entering any text. Each printing device discovered or updated within this print discovery will contain this location. • You can automatically obtain the location via SNMP protocol by entering the **%location%** parameter. In such case, the location is taken from the location parameter defined on the Web User Interface of each particular device discovered or updated within this print discovery. • You can leave this setting empty. In such case, the location of the printing device is not set/updated during the discovery. Updated printers maintain their current location and new printing devices have the location parameter undefined. The location of a printing device is displayed and can be changed on its properties panel (see *"Editing printing devices"* on page 88).
First run actions	
Activate:	Automatically activates the device if the current license allows it.
Create direct queue:	If you select this option, MyQ will automatically create a direct queue for the device. The name of the queue is the same as the system name of the device. For more information about print queues, see *"Queues "* on page 173.
Copy settings from the queue:	Here you can enter or select a direct queue from which the settings of the newly created queue are copied. For more information about print queues, see *"Queues "* on page 173.

Print test page:	The MyQ server will automatically send a test page to the newly created direct queue.
Print as:	If you select the **Print test page** option, you have to select a user account under which the test page will be printed.
Windows printer:	In this section you can automatically install print port and printer driver on MyQ server. For more information about remote install of print ports and drivers see "MyQ DDI manual" and *"Queues "* on page 173.

8.5. Activating and deactivating printing devices

Unless it was automatically activated during printer discovery, a newly added device is not active in MyQ and some of its data are not displayed (its serial number, type, counters etc.). The next step is to activate the device.

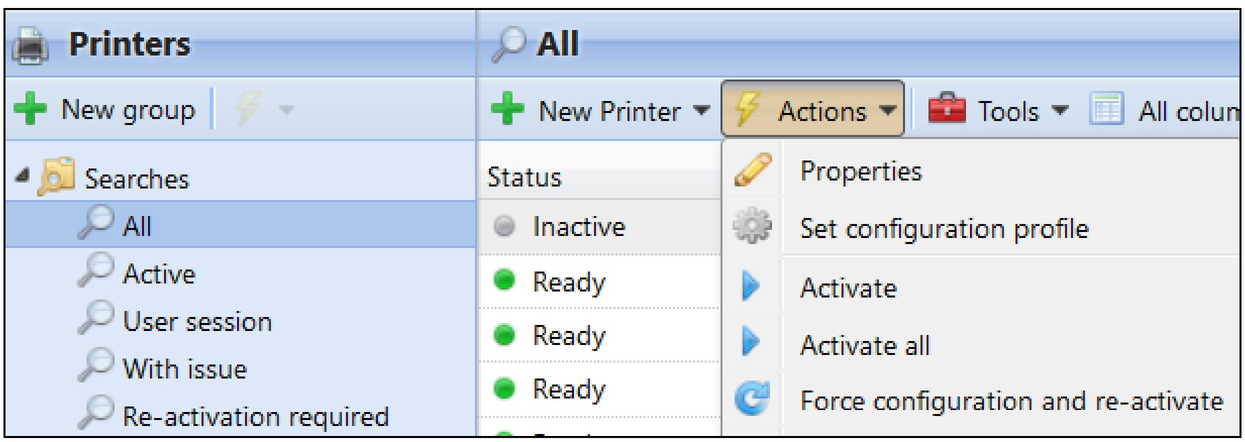


FIGURE 7.5. Activating printing devices on the **Printers** main tab

To activate selected print devices:

1. After selecting the printers right-click and click **Set configuration profile**. A pop-up window with the same name opens.

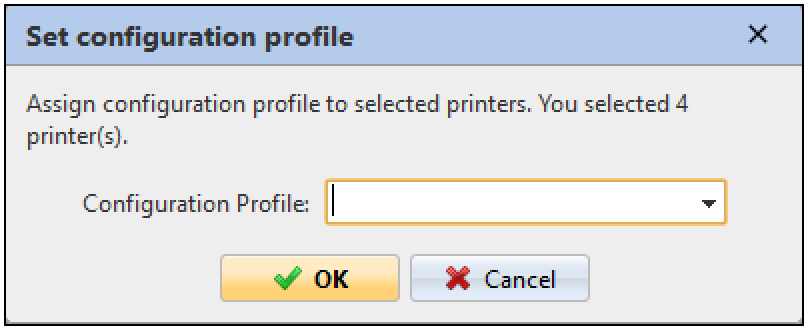


FIGURE 7.6. Set configuration profile for selected printers

2. Select a profile from the drop-down and click **OK**.

NOTICE: If the selected profile has *Embedded* as **Terminal type** and an installation package that mirrors the selected printers, you will embed the selected terminals during activation.

3. With your selection still intact, right-click once more and select **Activate**.

INFO: You can also activate or deactivate printers separately by clicking the printer in the overview and in the properties panel click either the **Activate** or the **Deactivate** button.

To activate all the devices:

1. On the bar at the top of the **Printers** main tab, click **Actions**. The **Actions** drop-down appears.
2. Click **Select all.**
3. Right-click the selection and click **Set configuration profile**.

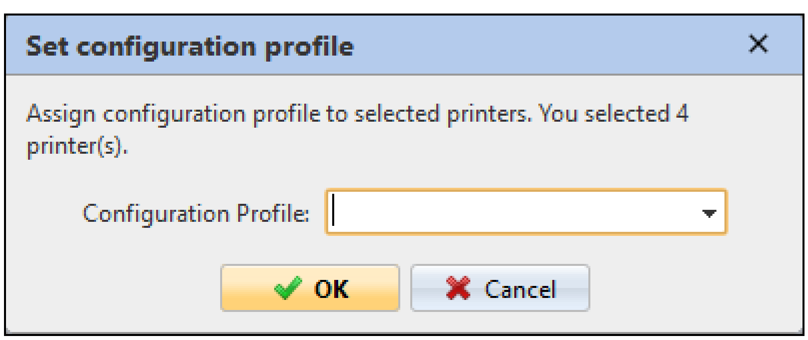


FIGURE 7.7. Set configuration profile for all printers

4. Select a profile from the **Configuration Profile** drop-down and click **OK**.

5. Right-click the selection and click **Activate all**.

To deactivate activated printing devices

1. On the list of printers on the **Printers** main tab, select the devices that you want to deactivate, and then click **Actions**. The **Actions** drop-down box appears.

2. In the drop-down, click **Deactivate**.

INFO: Alternatively, you can activate all printing devices by clicking **Activate** under **Activate printers** on the **Home** screen.

NOTICE: Although there is no limit to the number of printing devices you can add to the MyQ system, you cannot activate more printing devices than your license allows.

8.6. Deleting and undeleting printing devices

If you delete a printing device, you will not be able to use it but its data will be permanently stored in the MyQ database.

NOTICE: It is not possible to add the same device twice as its MAC address is unique and there cannot be two devices with an identical MAC address in the system. If you want to use the deleted device again, you have to undelete and reactivate it.

8.6.1. Deleting printing devices

To delete selected printing devices, do the following:

1. Select the printing devices you want to delete from the list on the **Printers** main tab.

2. Click **Actions**. The **Actions** drop-down box appears.

3. Click **Delete**.
   You can find the deleted printing devices under the **Deleted** search option.

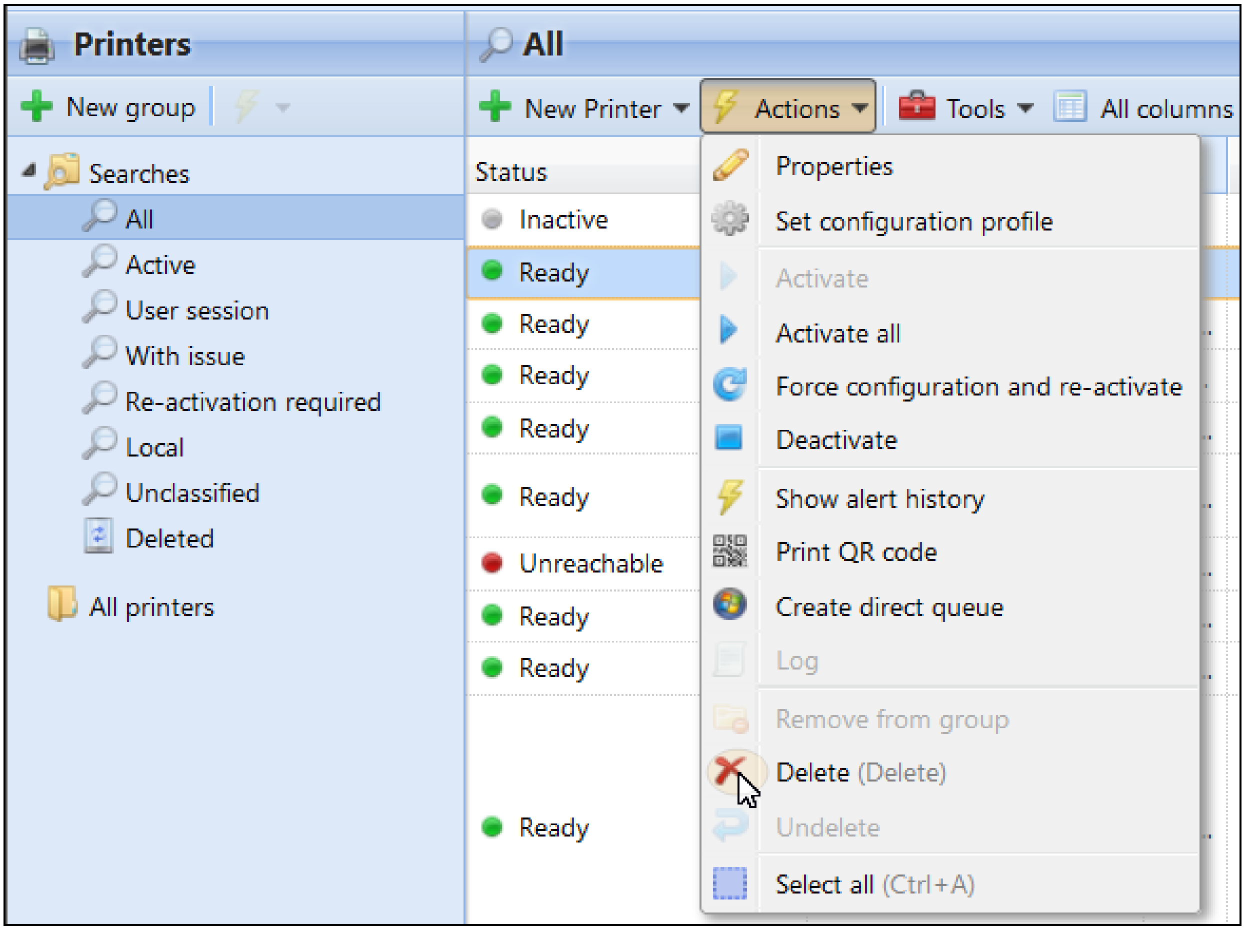


FIGURE 7.8. Deleting the selected printing device

8.6.2. Undeleting printing devices

To undelete selected printing devices, do the following:

1. On the group tab on the left side of the **Printers** main tab, under **Searches**, select the **Deleted** search option. The list of deleted printing devices appears.
2. On the list, select the printing devices that you want to undelete, and then click **Actions**. The **Actions** drop-down box appears.
3. In the drop-down box, click **Undelete**.

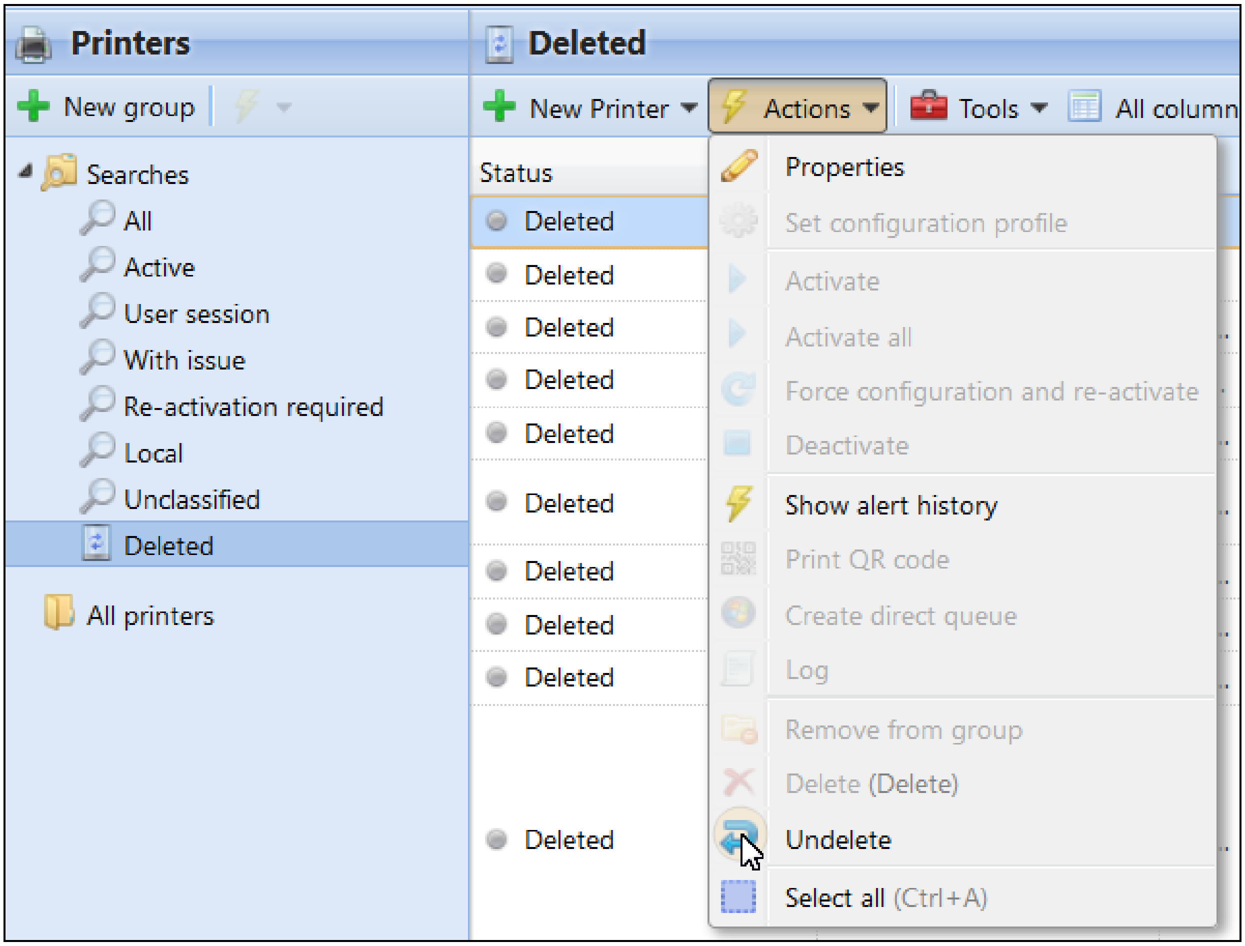


FIGURE 7.9. Undeleting the selected printing device from the **Deleted** list on the **Printers** main tab

NOTICE: The undeleted printing devices are not active; you have to activate them again.

8.7. Editing printing devices

Each individual printing device has its own properties panel. To open the panel, double-click the printing device on the list of printing devices on the **Printers** main tab. The properties panel opens on the right side of screen. There you can **Deactivate** it or perform some specific **Actions** on this printer.

The panel is divided into four tabs: **General**, , **Groups**, **Queues** and **Rights**. On the **General** tab, you can change the printing device settings, on the **Groups** tab, you can add the device to groups, on the **Queues** tab, you can add the printing device to queues and on the **Rights** tab you can give user rights to the device.

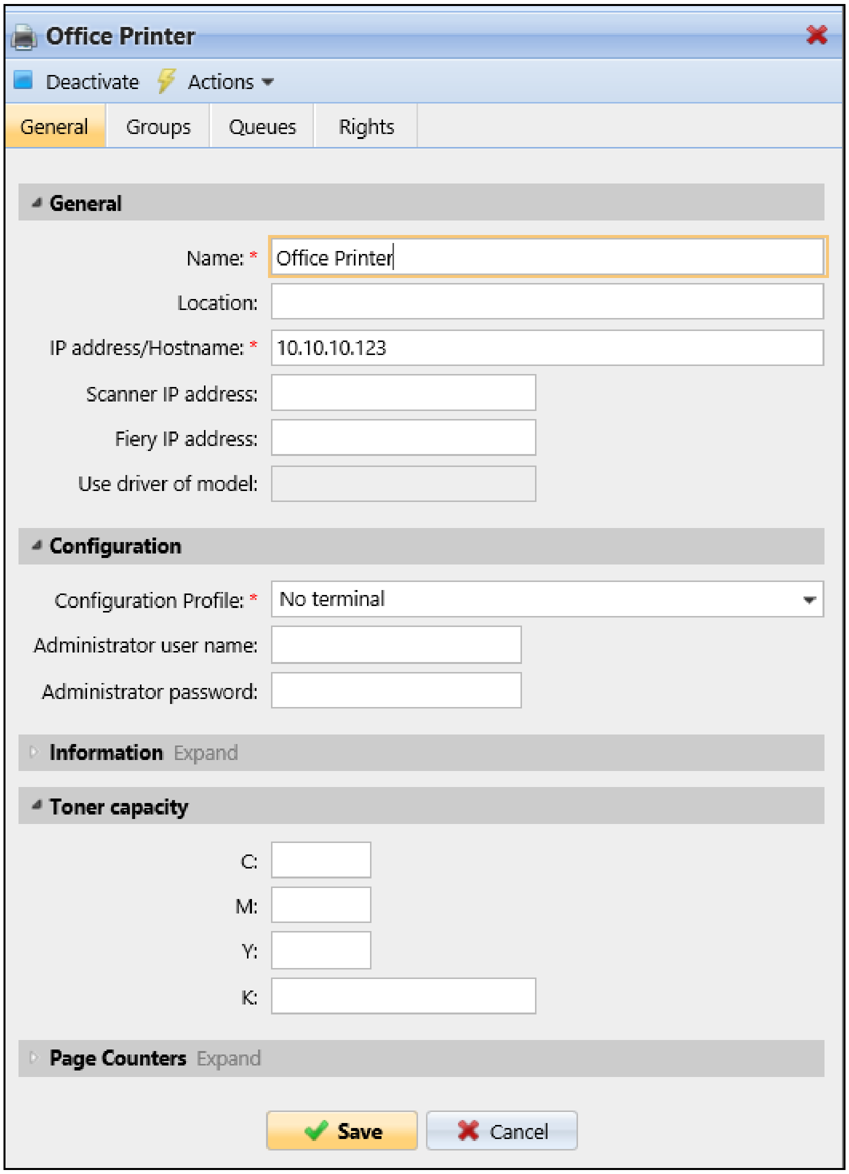


FIGURE 7.10. Individual printing device properties panel

8.7.1. Printing devices information and settings

In the table below, you can see the information and settings displayed on each printing device properties panel.

INFO: The settings mentioned in the following table are basic settings of printing devices.

General	
Name*	Name of the printing device, any string can be used.
Location	If it is required, you can specify the location of the printing device here.
IP address/Hostname*	The IP address or hostname of the printing device.
Scanner IP address	The IP address of the scanner (if the device scanner has a different IP than the printing device).
Fiery IP address	The IP address of the Fiery module (if the device is equipped with it).
Use driver of model	Alternative model name. If your printing device is not listed in the current database of supported models, you can enter the type of supported printing device which stands close to your model. For more information about supported models, please contact **support@myq-solution.com**.
Configuration	
Configuration Profile	Select a profile from the drop-down or create a new one to embed the printer by clicking **+Add new**. Then add a **Name**, install the terminal package, set the **Login methods** and the **Printer credentials** as applicable to the printer.
Administrator user name	Enter the admin user name. If you embed the printer separately this user name should match the one in the configuration profile.
Administrator password	Enter the admin password. If you embed the printer separately this password should match the one in the configuration profile.

Information	
Brand	Information about the printing device manufacturer. It is automatically detected from the device.
Model	Information about the printing device model name. It is automatically detected from the device.
Serial number	The printing device serial number. It is automatically detected from the device.
MAC address	The printing device MAC address. It is automatically detected from the device and it is used as a unique identification of the device in the MyQ® system. Therefore, only one device with a particular MAC address can be activated.
Asset number	Additional option for identification of the printing device.
Contact	Contact info of the person responsible for the printing device maintenance.
Purchase date	Purchase date of the printing device.
Notes	Additional information about the printing device.
Toner Capacity	
C	Capacity of the printing device CYAN toner.
M	Capacity of the printing device MAGENTA toner.
Y	Capacity of the printing device YELLOW toner.
K	Capacity of the printing device KEY (black) toner.

Page Counters	
B&W Print	Total amount of B&W pages printed on the device.
Color Print	Total amount of color pages printed on the device.
B&W Copy	Total amount of B&W pages copied on the device.
Color Copy	Total amount of color pages copied on the device.
Single color copy	Total amount of single color pages copied on the device.
Scanner	Total amount of pages scanned on the device.
Fax	Total amount of incoming faxes printed on the device
Print total counter adjust for load balancing	The entered value is added to the printed pages counter to evenly spread print load between devices in tandem queues. For more information about this option, see *"Types of queues"* on page 179.

8.7.2. Adding printing devices to groups and removing them from groups

INFO: For more information about groups, see *"Groups of printing devices"* on page 96.

To add a printing device to a group, do the following:

1. On the bar at the top of the **Groups** tab, click **+Add**. The **Select group** dialog box appears.

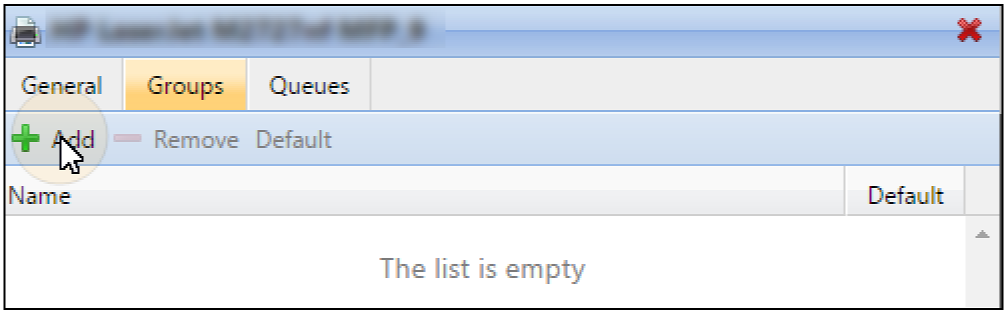


FIGURE 7.11. Adding a printing device to a group of printing devices

2. In the **Select group** dialog box, select the groups where you want to add the device, and then click **OK**.

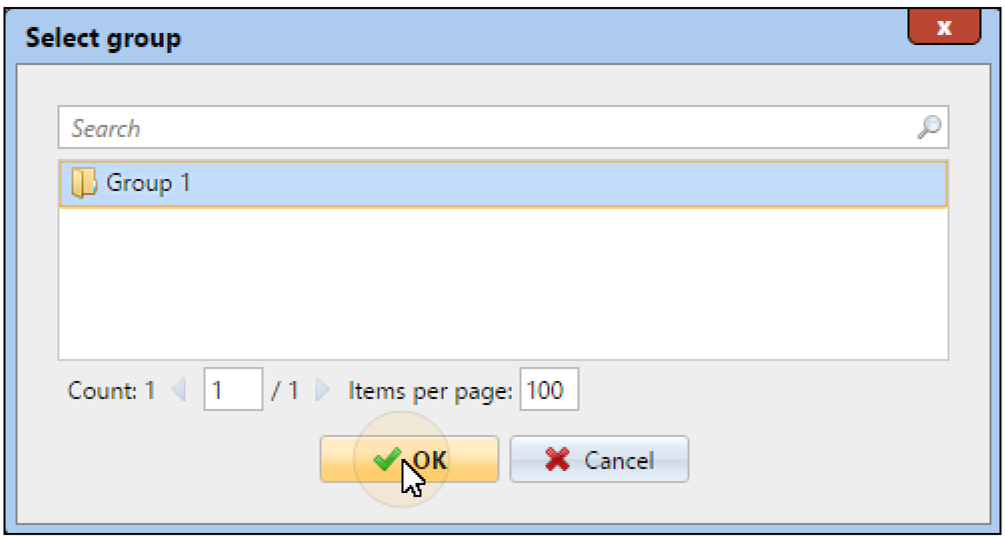


FIGURE 7.12. Selecting the group in the **Select group** dialog box

NOTICE: To add a printing device to a group on the **Printers** main tab using drag and drop, drag the printer and drop it on the group icon on the groups tab on the left side of screen.

To remove a printing device from a group, do the following:

- On the bar at the top of the **Groups** tab, click **—Remove**. The group disappears from the **Groups** tab.

NOTICE: To remove selected printing devices from a group on the **Printers** main tab, select the group there, select the printing devices that you want to remove, click **Actions**, and then click **Remove from group** in the Actions drop-down box.

8.7.3. Adding printing devices to queues and removing them from queues

INFO: For more information about Queues, see *"Queues "* on page 173.

To add a printing device to a queue, do the following:

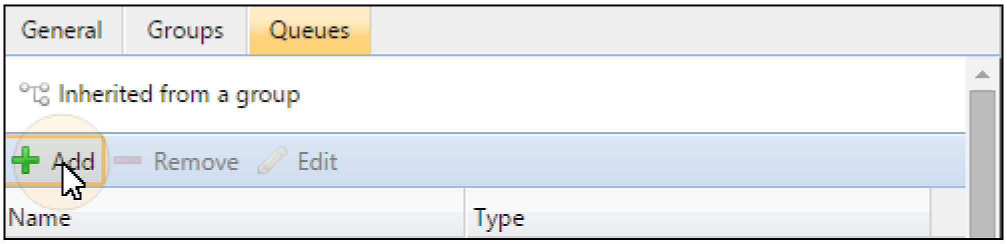


FIGURE 7.13. Adding printing devices to queues on the **Queues** tab

1. On the bar at the top of the **Queues** tab, click **+Add**. A search dialog box appears to the left.
2. In the **Dialog** box, find the queue where you want to add the device, and then click **OK**.

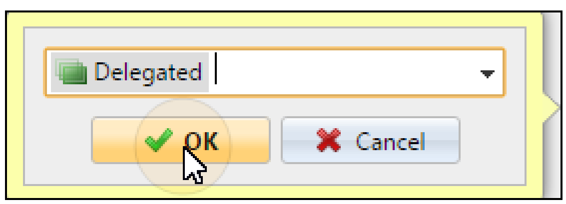


FIGURE 7.14. Selecting the queue

To remove a printing device from a queue:

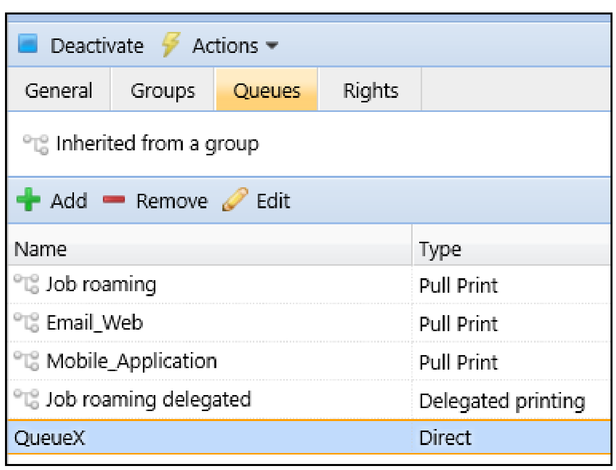


FIGURE 7.15. Removing a printer from a queue in the printer properties

- On the bar at the top of the **Queues** tab, click **— Remove**. The queue disappears from the **Queues** tab.

8.8. Groups of printing devices

All printing devices in MyQ can be divided into groups based on their location, model, vendor, category etc. On the **Printers** main tab, you can create new groups of printing devices. There are a number of MyQ functions where groups are used, for example, they can be assigned to particular print queues (see *"Queues "* on page 173), users can be given rights and restrictions concerning particular groups (see *"Users"* on page 111) and reports can be set to concern particular groups only (see *"Reports "* on page 287).

8.8.1. Creating groups of printing devices

To create a group of printing devices, do the following:

1. On the group tab on the left side of the **Printers** main tab, right-click **All printers**, and then click **+Add Group** on the shortcut menu. The new group properties panel opens on the right side of screen.

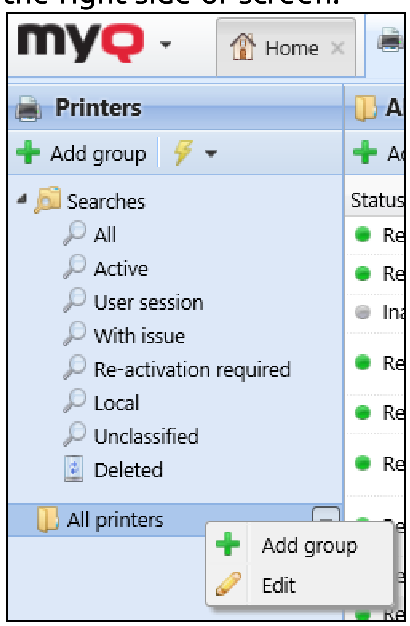


FIGURE 7.16. Adding new group of printers

2. On the panel, enter name of the new group, eventually give rights to users or groups of users, and then click **Save**.

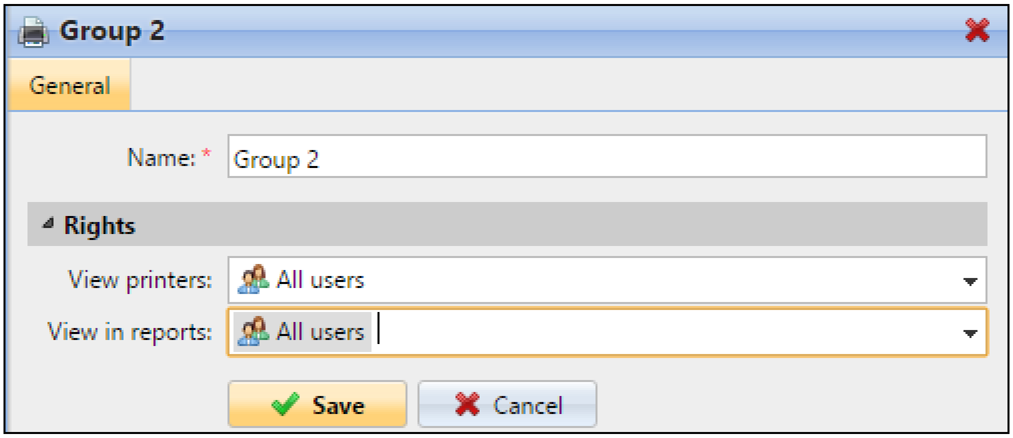


FIGURE 7.17. New group properties panel

Rights

View printers	The right to see and manage printers from this group on user interface.
View in reports	The right to see this group of printers in reports.

NOTICE: If you want the new group to be placed under an already existing group, select the parent group, and then click **+ Add Group** (or right-click the parent group, and then click **+ Add Group** on the shortcut menu).

8.8.2. Deleting groups

To delete a group of printing devices, do the following:

- On the group tab on the left side of the **Printers** main tab, right-click the group you want to delete, and then click **Delete** on the shortcut menu.

8.9. Exporting printing devices

On the **Printers** main tab, you can export the list of printing devices with all the information that are displayed on the current view to a CSV file.

To export the list of printing devices:

1. On the toolbar at the top of the **Printers** main tab, click **Tools**, the tools drop-down box appears.

2. On the drop-down box, click **Export**.

8.10. Monitoring network printing devices in offline mode

The usual way of communication between the MyQ system and a printing device is via SNMP protocol. In case this method cannot be used, for example if the printing device does not support the SNMP protocol, you can use the MyQ parser to monitor number of pages and other basic properties of jobs sent to be printed on a printing device. This accounting method is referred to as the **Offline accounting**.

NOTICE: The main disadvantage of the offline accounting feature is its inaccuracy. Due to the fact that the communication of MyQ and the printing device is one-sided and restricted to sending print data to the device, it is not possible to check if the data are actually printed. Therefore, MyQ charges the print job based on the information from the job parser received after the job is sent to the printing device. Even if the print job is canceled halfway through the print, it is charged as a whole.

To enable the offline accounting mode of a printing device

1. On the **Printers** main tab, double-click the printing device to open its properties panel.

2. On the panel, in the **Use driver of model:** text box, enter the value **offline**, and then click **Save**.

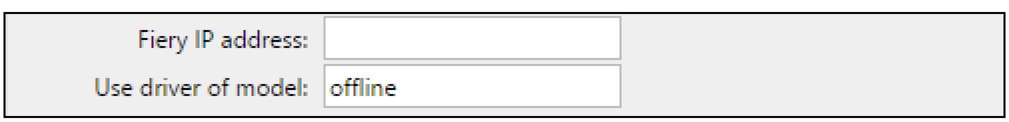


FIGURE 7.18. The Use driver of model setting on the printing device properties panel

NOTICE: Before enabling the offline accounting mode, deactivate the printing device. The **Use driver of model:** setting cannot be changed on activated printing devices. Once you enable the offline accounting mode, reactivate the printing device.
For information on activating and deactivating printing devices, see *"Activating and deactivating printing devices"* on page 84.

8.11. Local printing devices monitoring

Besides monitoring network printing devices, MyQ is able to monitor the number of printed pages on devices connected locally via a parallel port or USB port. In such case, the number of printed pages is extracted from the print spooler as it is being processed by the print driver.

To extract the data provided by the spooler, you need to install the **MyQ Smart Print Services** Windows service to all the computers that you print from to MyQ and set up the Local Print Monitoring there. All Jobs sent to selected types of ports will be detected from the print spooler.

NOTICE: The main disadvantage of the local print monitoring feature is its inaccuracy. As the communication of MyQ and the local printing device is one-sided and restricted to sending print data to the device, it is not possible to check if the data are actually printed. Therefore, MyQ charges the number of pages extracted from the spooler when they are sent to the printing device. Even if the print job is canceled halfway through the print, it is charged as a whole.

NOTICE: Local printing devices monitoring is available only on computers with MS Windows.

8.11.1. Installation and setup of MyQ Smart Print Services on client's computers

For information on how to install and set up MyQ Smart Print Services on client's computers, see the *Guide to MyQ Smart Print Services for Windows*.

NOTICE: Whenever you add a local printer or change settings of print ports (see *"Printing to MyQ"* on page 207), you have to restart the **SmartPrintServices** service in the Windows Task Manager, under Services.

8.11.2. Accounting on the local printing devices

After the print job is sent to one of the local printing devices, the number of pages and other information about the print job are saved to the MyQ Smart Print Services folder of the particular registry file. Once the connection with the MyQ server is established, all information are automatically transferred to the MyQ server and deleted from the registry. Therefore, it is not necessary to be permanently connected to the MyQ Server online.

Once the server is connected and data are sent to the server, information about the job appear in an **Info** entry in the MyQ log. Each entry contains information about the person who printed, the printing device that the user printed on and the number of printed pages. The MyQ server automatically creates a new local type printing device. Its name has the following form: **printer@computer**.

An appropriate price list can be set for local printing devices. Therefore, they can be included in the monetary reports. If the user that prints on the local printing device already exists, their prints are simply assigned to them. Otherwise, the job is accounted to the ***unauthenticated** user.

8.12. Printer Events

Printer Events are customizable actions initiated by specific events, which are based on printing devices alerts. The alerts are set up by first, defining the events and then selecting and setting the actions triggered by these events. The actions are of two kinds: as a response to an event on a printing device, MyQ can send an email notification to one or more persons, or it can terminate the user session on the embedded terminal of the device.

The events can be set on the Printer **Events** settings tab and the **Event actions** on the **Event actions** settings sub-tab.

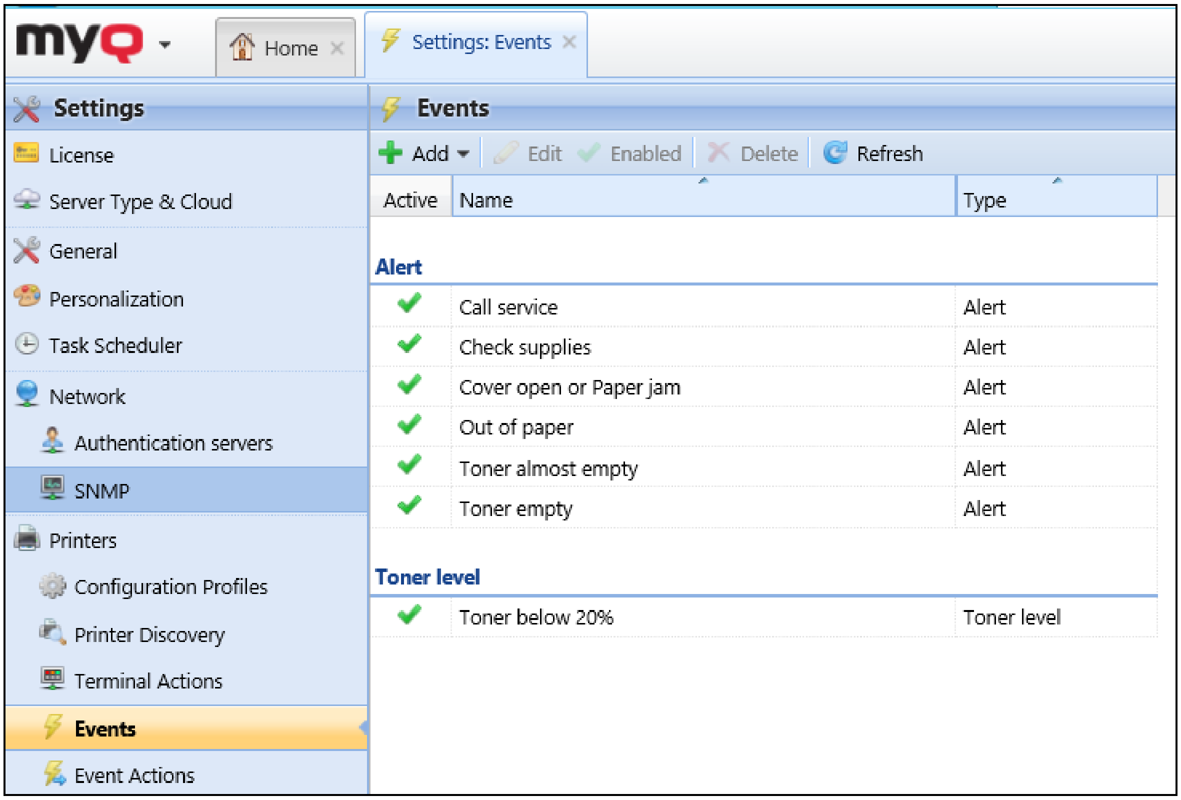


FIGURE 7.19. **Events** settings tab

INFO: You can create a report with the **Event History** type, which informs about all events on selected printers or groups of printers during a certain period of time.

8.12.1. Events

There are seven predefined alerts on the **Events** settings tab. These correspond to common situations, such as empty toner or a printer out of paper, or to states of printing devices that require particular actions, such as technical support or supply check. They are triggered by the following states of a printing device:

- **Call service** — The printing device requires authorized technical service.
- **Check supplies** — Consumables of the printing device need to be checked.
- **Cover open or Paper jam** — Either a device cover is open or a paper is jammed.
- **Out of paper** — The printing device is out of paper.
- **Toner almost empty** — One or more toners on the device are almost empty.

- **Toner below 20%** — One or more toners on the device are below 20%.
- **Toner empty** — One or more toners on the device are empty.

Changing the toner level to be monitored

The toner level to be monitored is set to 20% by default but can be easily changed following the instructions below:

1. On the alerts list on the **Events** tab, double-click the alert. The properties panel opens on the right side of the screen.
2. Change the value in the **Level below** field (in %).
3. Change the name of the alert according to the new monitored level.

8.12.2. Event actions

The two available actions are 1) sending an email and 2) terminating the user session on an embedded terminal. Each action can be either applied to all printers, or it can be restricted to specific groups of printers.

There is one predefined event action: Toner below 20%. This action applies to all printers and responds to the Toner below 20% event .

To create a new event action

1. Go to **MyQ, Settings, Event Actions** and click on **+Add action**. Select the type of action from the drop-down: **+Send email** or **Log out user**.
2. On the panel, set all the options of the action and click **Save**.

Setting event actions

The parameters described below belong to the **Send email** and **Log out user Event Actions**.

Event Action	
Enabled	Enable, or disable the event action.
Name	Add a name for the action

Event	Select the event that will initiate this action.
Printer Group	Select the printer group(s) that the action applies to from the list
Delay	Set a time period after which the email is sent (in minutes).
Recipient	Enter the email recipient(s). You can use the %PRINTER_CONTACT% parameter to send the email to the device's contact. See *"Contact"* on page 91.
Subject **+** **Message**	Enter the email subject and message. You can use the following parameters: {PRN.NAME} — name of the printer {PRN.IP_ADDRESS} — IP address of the printer {PRN.SERIAL_NUMBER} — serial number of the printer {PRN.MODEL} — model name of the printer {PRN.PRINTER_MONO} — counter of B&W-color pages printed on the device {PRN.PRINTER_COLOR} — counter of color pages printed on the device {PRN.COPIER_MONO} — counter of B&W-color pages copied on the device {PRN.COPIER_COLOR} — counter of color pages copied on the device {PRN.SCANNER} — counter of scanned pages sent to email or folder {SUPPLY.INFO} — level of consumables in percents {ASSET.NUMBER} - the asset number of the printer

The administrator can view the **Event History** in **MyQ, Event History**:

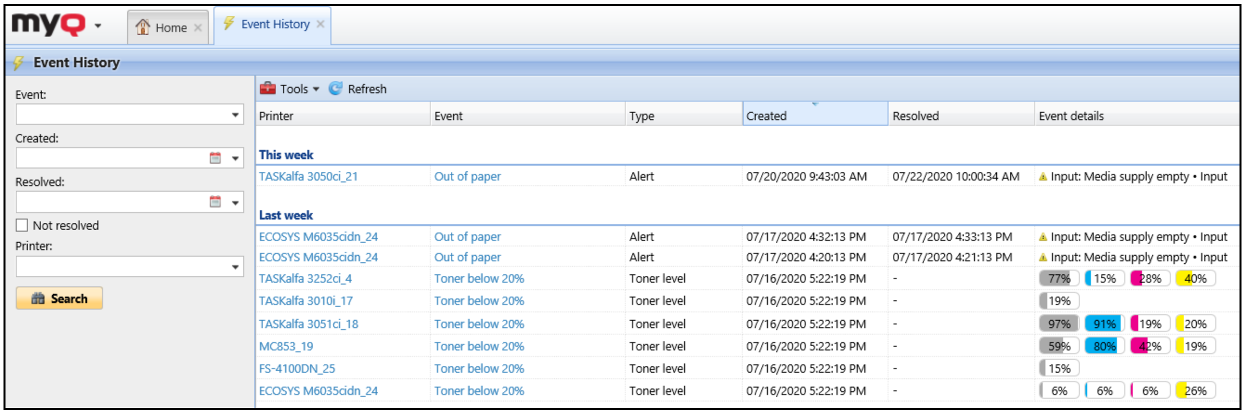


FIGURE 7.20. Event History

8.13. SNMP profiles

By default, the SNMP v1 protocol is used for communication with printing devices in the MyQ system. Instead of it, you can use the more recent SNMP v2c protocol or the SNMP v3 protocol, which significantly increases the communication security with a printing device.

Multiple SNMP profiles can be created in MyQ and each printing device can be assigned one of the profiles. This way, you can have one profile for all printing devices with a particular SNMP configuration.

INFO: You can change the default SNMP profile. To make any SNMP profile the default one, select it on the **SNMP** settings tab, and then click **Default** on the bar at the top of the tab (or right-click the profile, and than click **Default** on the shortcut menu).

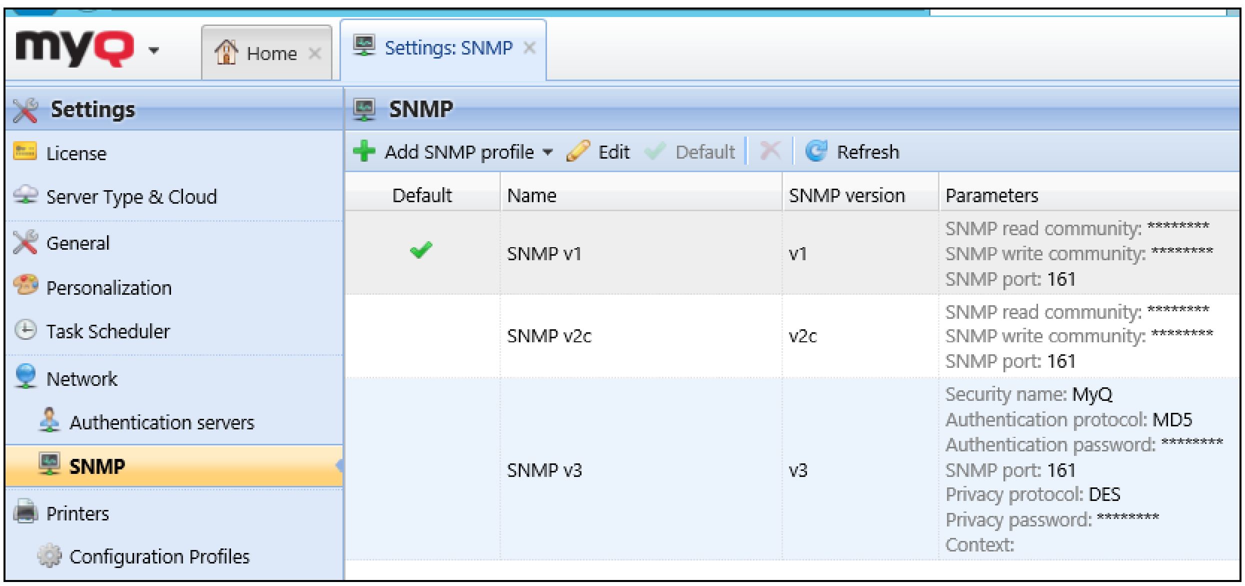


FIGURE 7.21. The SNMP settings tab on the MyQ Web Admin Interface

8.13.1. Adding and editing SNMP v1 and v2c profiles

With the SNMP v1 and v2c protocols, a single string called "SNMP Community string" is used to allow access to the device. Only two parameters need to be set in MyQ: the **SNMP read community** parameter and the **SNMP write community** parameter. Their values have to match the values of their counterparts on the Web User Interface of the printing device (Read Community, Write Community).

To add a new SNMP v1 or v2c profile

1. On the MyQ Web Admin Interface, open the **SNMP** settings tab. (**MyQ, Settings, SNMP**)

2. On the bar at the top of the **SNMP** tab, click **+Add SNMP profile**, and then click **+SNMP v1** or **+SNMP v2c** on the shortcut menu. The new SNMP profile properties panel opens on the right side of screen.

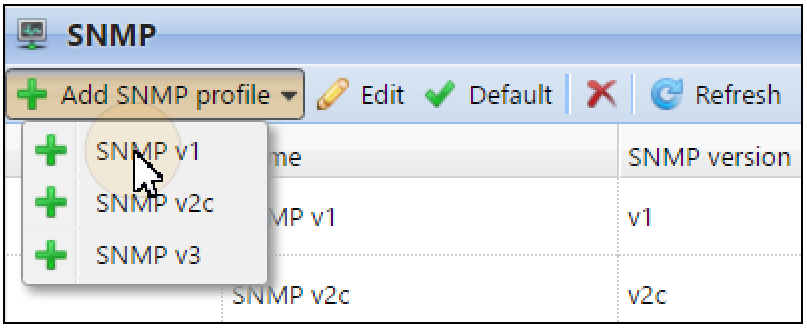


FIGURE 7.22. Adding a new SNMP v1 profile

3. On the panel, enter the name of the profile, set the parameters, and then click **Save**. The new profile is displayed on the list on the SNMP tab.

To open and edit a SNMP v1 or v2c profile

- To open the SNMP profile properties panel, select the profile on the SNMP settings tab, and then click **Edit** (or right-click the profile, and than click **Edit** on the shortcut menu, or double-click on the profile). The profile's properties panel opens on the right side of screen.

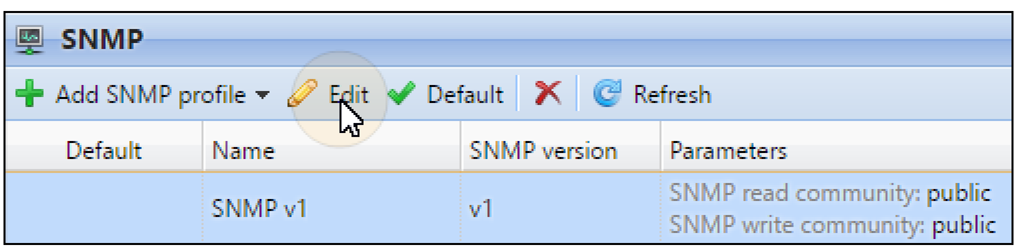


FIGURE 7.23. Openning the SNMP profile properties panel

- On the SNMP profile properties panel, you can change name of the profile and enter values of the **SNMP read community** parameter and the **SNMP write community** parameter according to the values that are set on the printing device's Web User Interface.

- Click **Save** to submit and store the changes of the profile.

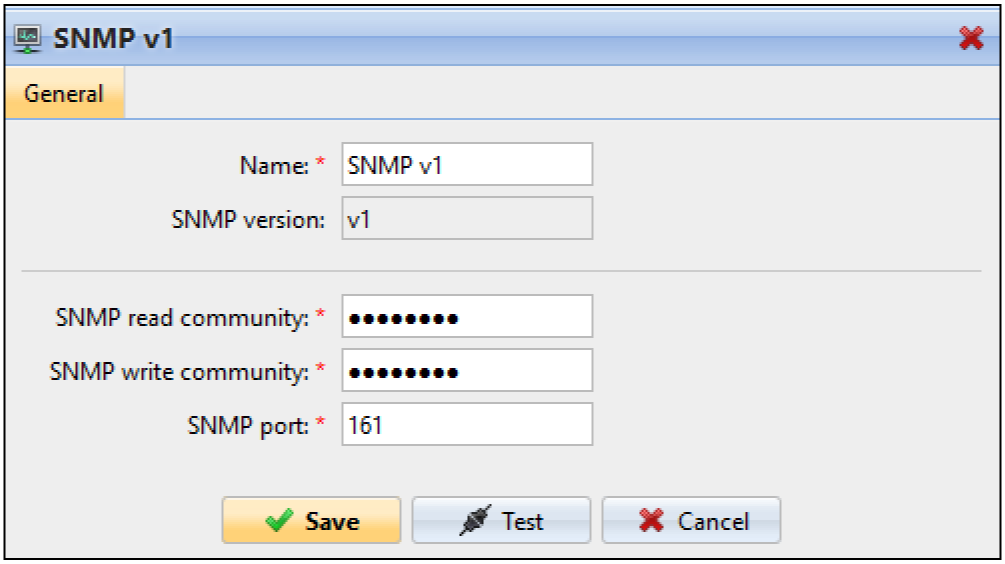


FIGURE 7.24. Editing and saving an SNMP profile

INFO: To check if you can connect to a printing device with the SNMP profile, click **Test**, enter the IP Address of the printing device and an OID, and then click **OK**. If the parameters are correctly set, the *SNMP connection was successful* message should be displayed on the panel.

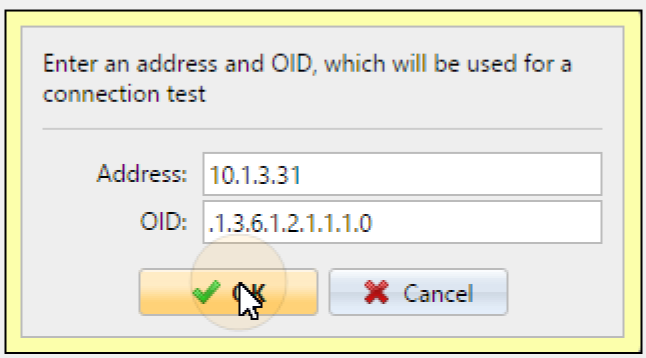


FIGURE 7.25. Testing the connection

8.13.2. Adding and editing SNMP v3 profiles

The SNMP v3 protocol contains additional elements of security, such as authentication and encryption. Each of these elements is set on the printing device and needs to be accordingly set in MyQ.

To add a new SNMP v3 profile

1. On the MyQ Web Interface, open the SNMP settings tab. (At the top-left corner, click **MyQ**, then click **Settings**, and then click **SNMP**.)
2. On the bar at the top of the **SNMP** tab, click **+Add SNMP profile**, and then click **+SNMP v3** on the shortcut menu. The new SNMP profile's properties panel opens on the right side of screen.

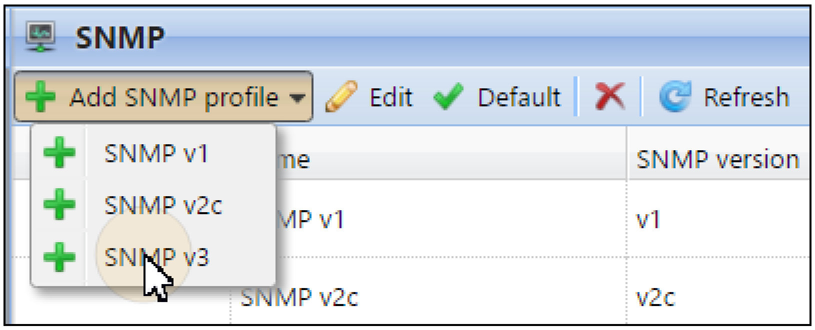


FIGURE 7.26. Adding a new SNMP v3 profile

3. On the panel, enter the name of the profile, set the parameters, and then click **Save**. The new profile is displayed on the list on the SNMP tab.

To open and edit a SNMP v3 profile

- To open the SNMP profile properties panel, select the profile on the SNMP settings tab, and then click **Edit** (or right-click the profile, and than click **Edit** on the shortcut menu). The properties panel opens on the right side of screen.

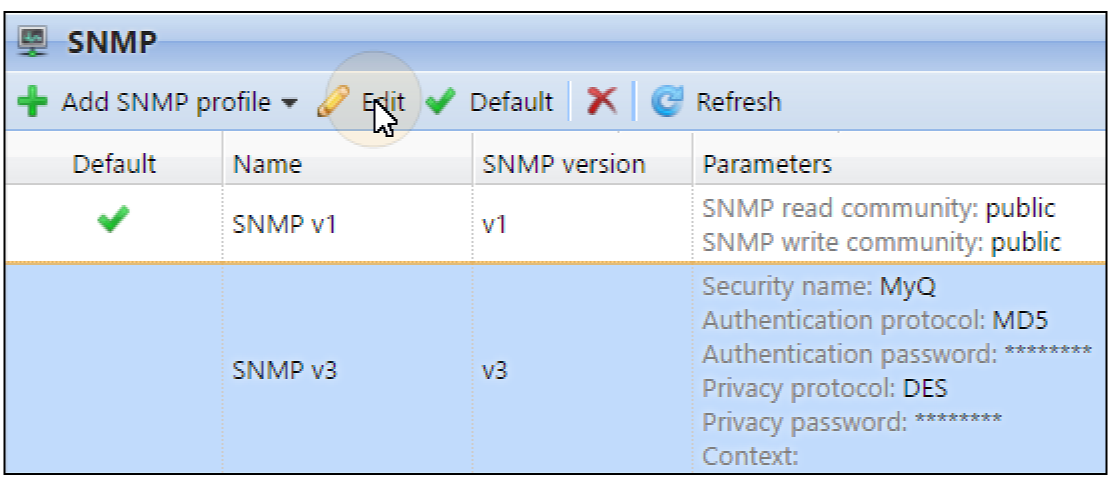


FIGURE 7.27. Openning the SNMP profile properties panel

- On the SNMP profile properties panel, you can change the profile's name, set its authentication parameters, its privacy parameters and eventually enter a context name. The values of all of the parameters have to match the values that are set on the printing device's Web User Interface.
- Click **Save** to submit and store the changes of the profile.

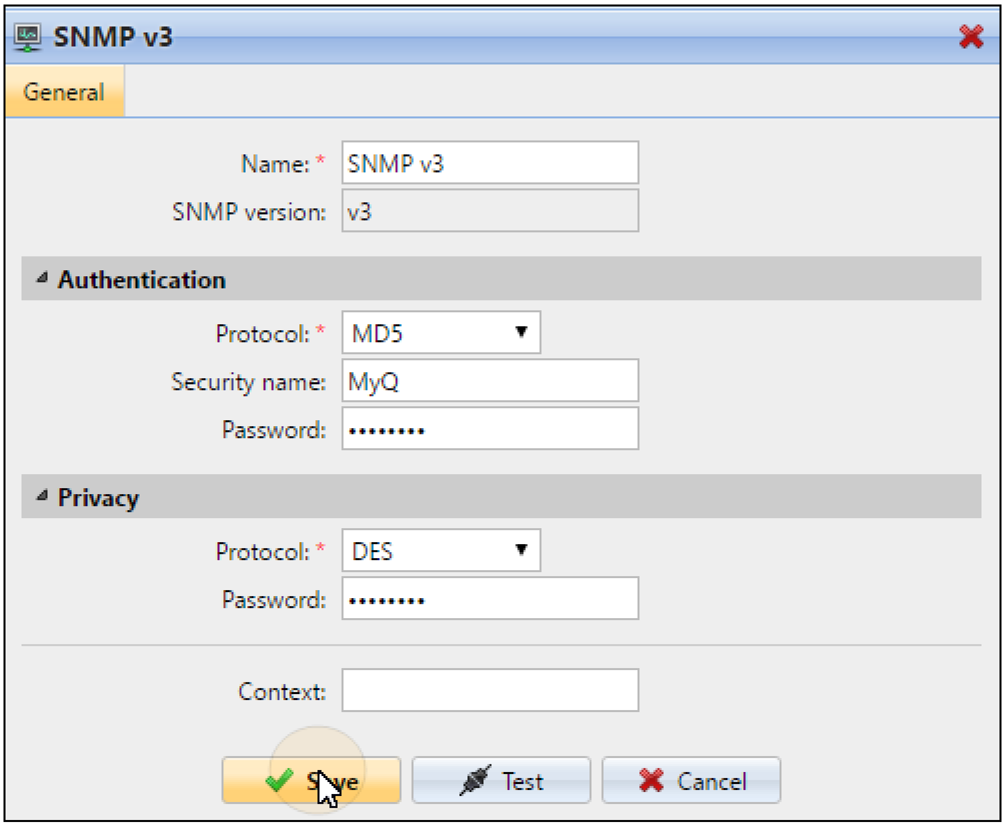


FIGURE 7.28. Editing and saving the SNMP profile

8.13.3. Deleting SNMP profiles

1. Select the SNMP profile on the **SNMP** settings tab.
2. Click **X**.
3. Confirm the action.

8.13.4. Attaching profiles to printing devices

1. On the MyQ Web Interface, open the **Printers** main tab. (At the top-left corner, click **MyQ**, and then click **Printers**.)
2. On the tab, select the printing device, click **Actions**, and then click **Properties** . The printing device's properties panel opens on the right side of screen.

3. On the panel, go to the **Configuration** section

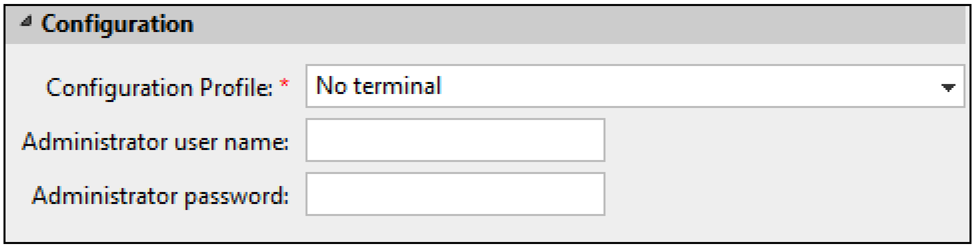


FIGURE 7.29. Printer - Configuration profile

4. Select a **Configuration Profile** that has the SNMP profile attached to it. In case of doubt go to **Settings - Configuration Profies** and check the profiles.

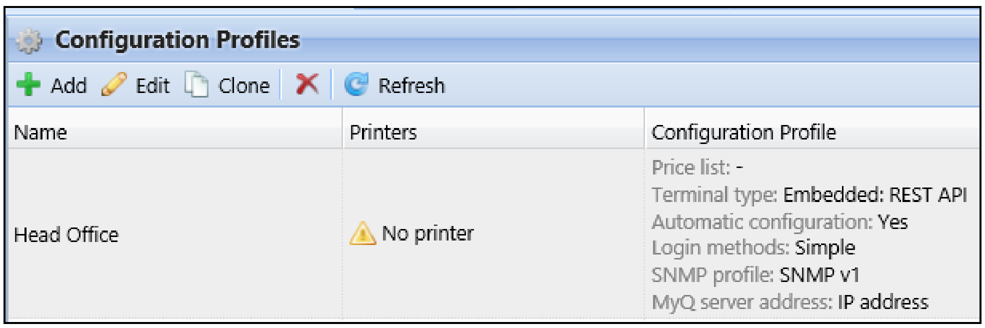


FIGURE 7.30. Configuration Profile with SNMP example

9. Users

This topic discusses one of the key MyQ functions: setting and management of users (user accounts). It covers the following subjects:

- Overview, registration, adding, importing, synchronizing and deleting users: List of users, Automatic registration of users, Manually adding users, Deleting and undeleting users
- Generating PIN: PIN generation
- Individual user settings: Editing user accounts, Enabling users to edit their profiles and select their delegates, Groups of users, Exporting users
- Job policies concerning users and printers: Policies
- Special administrative rights: Rights
- Securing personal data of MyQ users, anonymization: Securing personal data of MyQ users

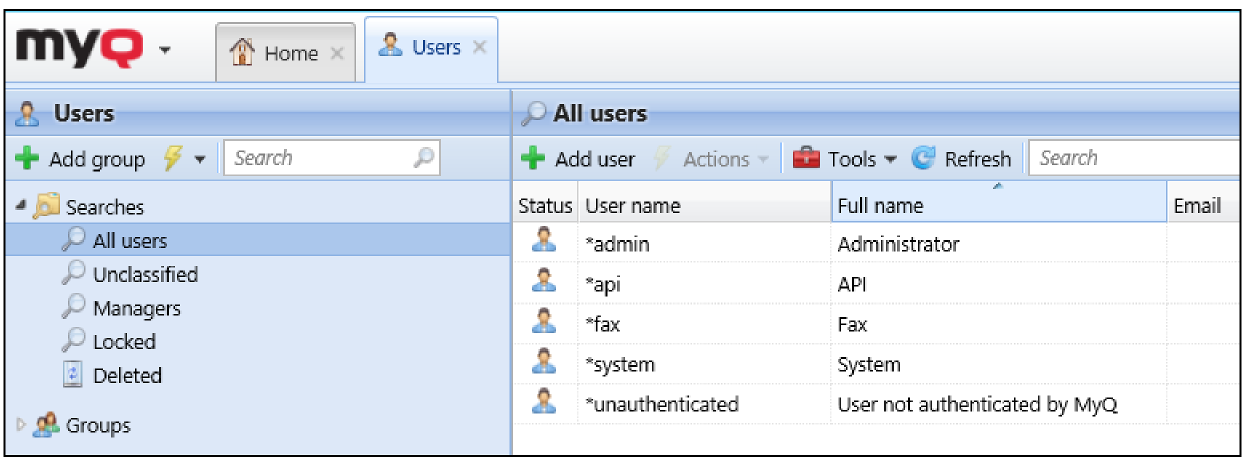


FIGURE 8.1. **Users** main tab

In the following chapters we describe other aspects of users and their accounts:

- Using External Authentication Servers for authentication in MyQ: user authentication using an LDAP or Radius server.
- User import and synchronization: user synchronization from LDAP, CSV files or Azure Active Directory, together with manual and scheduled runs of synchronizations.
- Detecting job owners: on how to identify the owner of a sent job.

- ID Card transformation: This chapter discusses the ID Card transformation feature in MyQ. The transformation might be necessary if you need to import card numbers from a third-party SW database and the card number format in this database doesn't match the format read by the MyQ card reader.

9.1. List of users

On the **Users** main tab, you can see users and information about them. With the **All users** search option selected, you see a list of all users that are currently in the system. Apart from this option, you can choose from the following options:

- **Unclassified** - select to display only those users that do not belong to any group
- **Managers** - select to display only managers of groups
- **Locked** - select to display users whose accounts have been locked
- **Deleted** - select to display only deleted users

9.1.1. Default system users

The database of every installation of MyQ contains five default system users. These users are used for administration of the MyQ system and cannot be deleted.

- ***admin** - This is the MyQ administrator account. It is used for administration of MyQ on the Web Administrator User Interface.
- ***api** - MyQ uses this account to connect to external applications.
- ***fax** - All printed faxes are charged to this account.
- ***unauthenticated** - If there are any printed, copied or scanned pages that for some reason cannot be assigned to concrete users, they are charged to this account. This can happen for example if the print server is not available and users print in an emergency offline mode on a printing device. It can also happen if someone prints directly on a printing device, bypassing the MyQ system. In such case, you might need to check the printing device security settings.
- ***system** - All the actions performed by the MyQ system are charged to the *system user.

9.2. Automatic user registration

Usually, only registered users can access the MyQ system and use the services there. However, in some exceptional cases it might be useful to enable automatic registration and thus provide all users with access to MyQ. Users can be automatically registered to the MyQ system in two ways:

- either they can register themselves on the MyQ Web User Interface or on an embedded terminal,
- or they can be automatically registered after sending a job to MyQ from their computer or via email as an attachment.

On the **Users** settings tab, under **New users registration**, you can enable and disable these options and for each option, you can select one or more groups to which the registered users will be added.

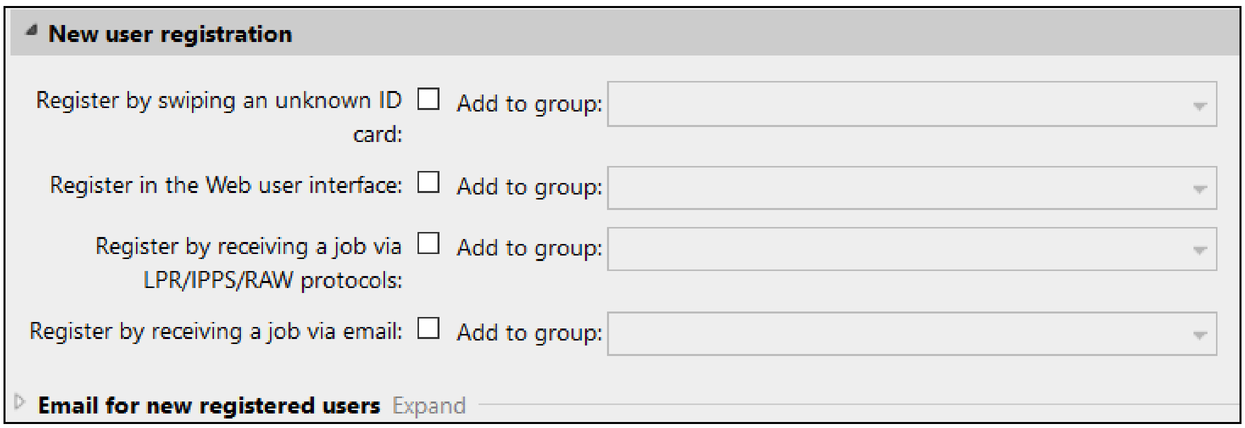


FIGURE 8.2. The four automatic user registration options can be set on the **Users** settings tab

Register by swiping an unknown ID card

With this option selected, users can register themselves at a printing device with an embedded terminal by swiping an unknown ID card at the card reader.

- After they swipe the card, a new account called **anonymX** (anonym1, anonym2 etc.) is created and they are automatically logged on the terminal. There, they can edit the account using the **Edit Account** embedded action. If the **Enable user profile editing** option is enabled on the **Users** settings tab, under general (See FIGURE 8.2 above.), they can change their full name, email and language, otherwise they can only change the language.

Register on the MyQ Web User Interface

With this option selected, users can create accounts on the MyQ Web User Interface.

1. Click **New Account** at the bottom-left corner of the MyQ login window.
   The **New Account** registration widget opens.
2. Enter name and email address.

3. Click **Register**. The newly created account is given the same name as the email address entered this way.

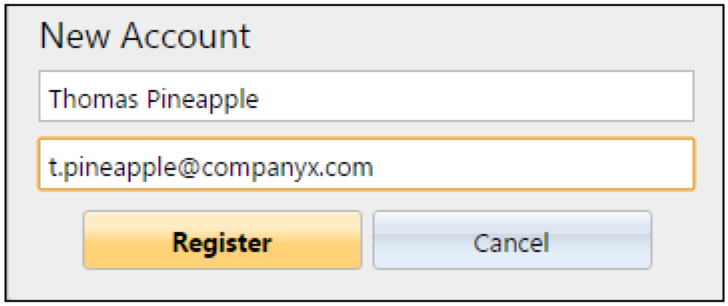


FIGURE 8.3. Registering the user

- After creating the account, the **New account created** message box appears. After clicking **Show PIN** there, the user can see their user name and password.
- The user receives an email with information about the new account. The default message contains their user name and PIN. You can change the message in the **Email for new registered users** section.

Register by receiving a job via LPR/IPPS/RAW protocol

With this option selected, users can register themselves by sending a print job from their computer via the LPR, IPPS or RAW protocol.

- After a user sends the job, MyQ detects their name according to the currently set method of user detection, checks whether the user is already registered, and in case of an unknown sender user name, it creates a new account. The newly created account is given the same name as the job sender name detected this way. For more information about the methods of detecting users, see *"User detection method"* on page 182.
- The user receives an email with information about the new account. The default message contains the user name and PIN. You can change the message in the **Email for new registered users** section.

> **INFO:** For more information about using the LPR protocol for printing to MyQ, see *"Printing to MyQ"* on page 207.

Register by receiving a job via email

With this option selected, users can register themselves by sending an email with an attached printable document. For more information about sending print jobs via email, see *"Printing from email and from the MyQ Web User Interface"* on page 222.

- The name of the newly created account is the email address from which the email was sent.
- The user receives an email reply with information about the new account. The default message contains the user name and PIN. You can change the message in the **Email for new registered users** section.

Email for new registered users

Here you can change the email body that informs the new users about their account.

- The values of the **%pin%**, the **%username%** and the **%realname%** parameters are PIN, user name and real name of the user.
- By clicking **Revert values**, you can reset the email body to the default.

9.3. Add users manually

To manually add a new user, follow these steps:

1. On the **Users** main tab, click **+Add User**. The properties panel of the new user opens on the right side of screen.
2. On the panel, enter the username and full name of the user, and eventually set other data of the user account (see *"User information and settings"* on page 121), and then click **Save**.

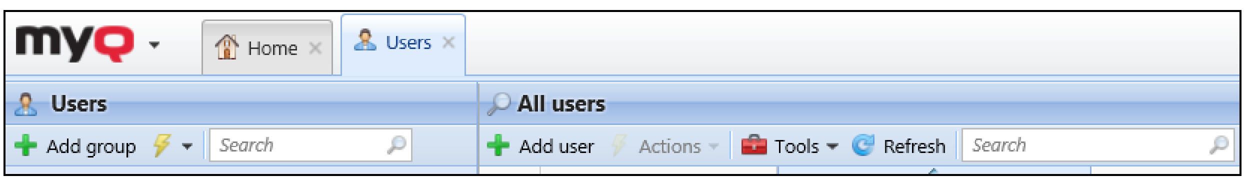


FIGURE 8.4. Manually adding users on the **Users** main tab

9.4. Deleting and undeleting users

When you delete a user, they are removed from all groups (including All users) and are moved to "Deleted". They are not completely removed from the MyQ database and can be undeleted.

9.4.1. Deleting users

To delete a user, do the following:

1. On the **Users** main tab, select the users that you want to delete, and then click **Actions**. The **Actions** drop-down box appears.

2. In the **Actions** drop-down box, click **Delete**.
   You can find the deleted users under the **Deleted** Searches option.

9.4.2. Undeleting users

To undelete a user, do the following:

1. On the group tab on the left side of the **Users** main tab, under **Searches**, select the **Deleted** search option.
   The list of deleted users appears.

2. On the list, select the users that you want to undelete, and then click **Actions**.
   The **Actions** drop-down box appears.

3. Click **Undelete**.

9.5. Generating PIN

On the **Users** settings tab, under **PIN**, you can select multiple options concerning PIN generation.

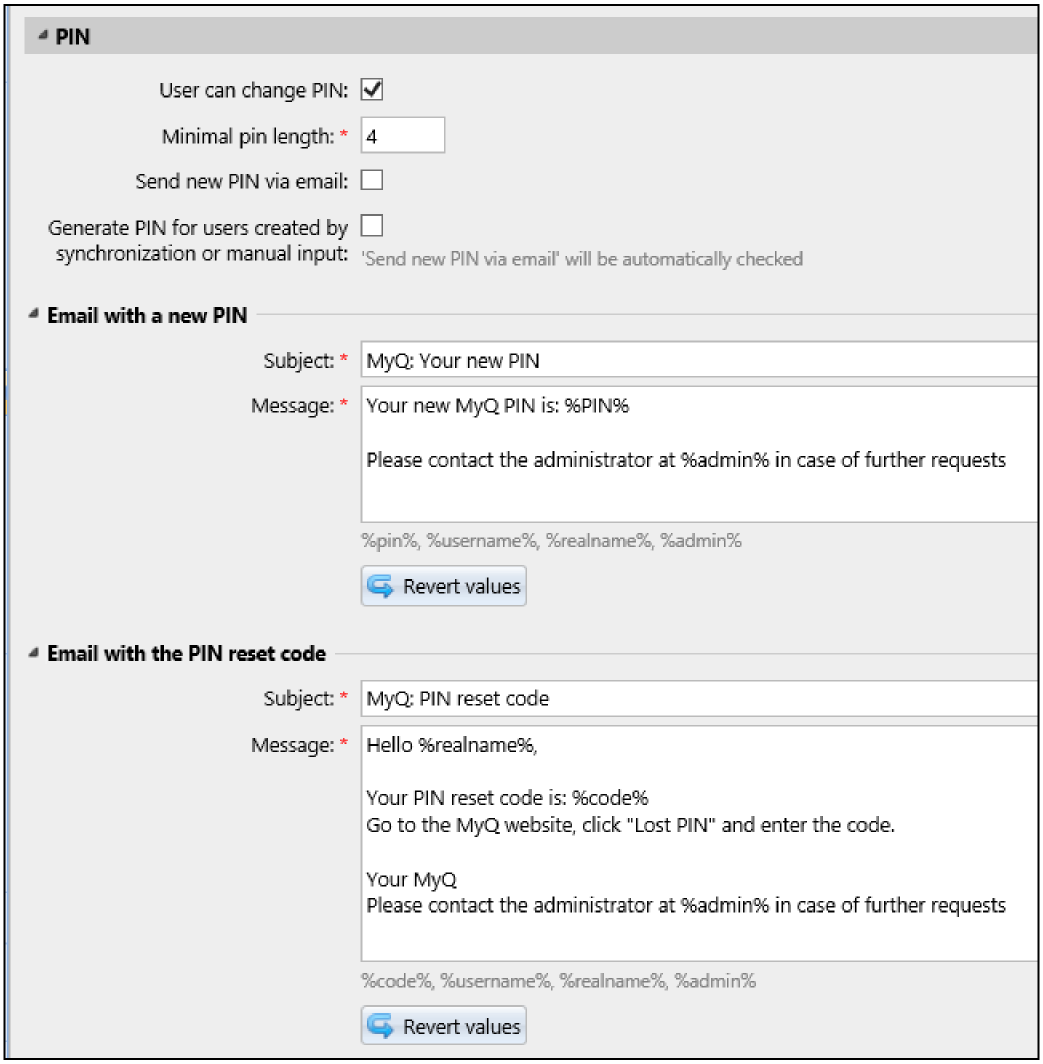


FIGURE 8.5. The **PIN** section of the **Users** settings tab

Users can change PIN

With this option selected, the users can generate a new PIN on their account on the MyQ Web User interface.

> **INFO:** The user can generate the new PIN by clicking **Generate PIN** on the **Home** screen of their user account on the MyQ web interface.

Minimal PIN length

This option determines the mandatory minimum PIN length. The number can be set between *4* and *16*.

If the administrator creates the PIN manually, it cannot be shorter than the value set in this field. If the PIN is generated by the system, it cannot be shorter than the value in this field and also cannot be shorter than the minimal value enforced by the number of users, described below.

The required minimal PIN length that depends on the number of MyQ users is:

- < 1000 — 4-digit pin is required
- 1000 - 10 000 — 5-digit pin is required
- 10 000 - 100 000 — 6-digit pin is required

If the administrator increases the **Minimal PIN length** value, a popup will prompt them to generate new PINs for all the active users. If the administrator chooses to generate new PINs, the old PINs will be deleted and new PINs will be automatically sent via email to all the active users. Otherwise, the old, potentially shorter PINs will be kept.

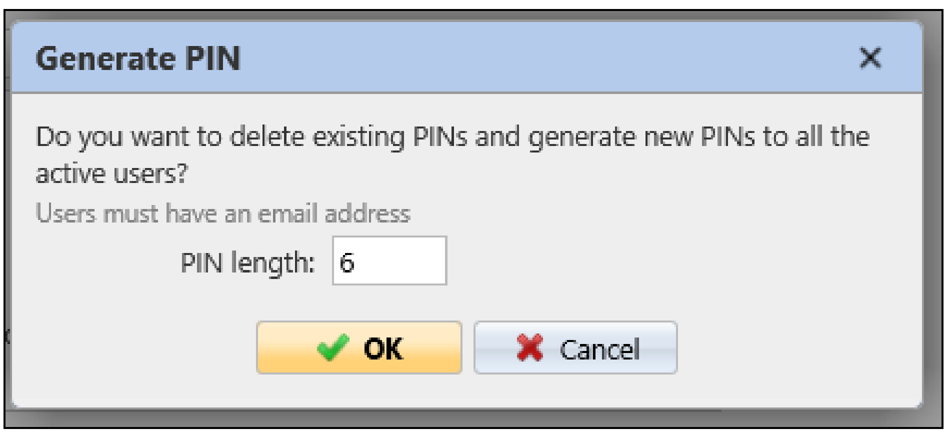


FIGURE 8.6. Delete old PINs and generate new ones confirmation pop-up

INFO: The required minimal length lowers the chance of randomly guessing the PIN. Also, trivial PINs, such as "1111" or "22222", are excluded from the automatic PIN generation process.

Generate PIN for users created in synchronization or manual input

With this option selected:

- A new PIN is generated for new, manually created users.
  - A manually created user without an email address will not receive the new PIN via email.

- During User synchronization, a new PIN is generated for every user that does not already have a PIN.
  - PINs are generated only for users with an email address. Users without an email address are skipped.

Send new PIN via email:

With this option selected, users are sent an email informing them about the new PIN every time a new PIN is generated.

This is automatically checked if the above option (**Generate PIN for users created in synchronization or manual input**) is selected.

> **NOTICE:** If new PINs are generated anytime during the use of MyQ, make sure that you select this option. Otherwise users do not receive the new PIN and cannot access their MyQ accounts.

There are also email templates you can use for informing the users about their new PIN (**Email with a new PIN**) or for providing them with a reset code in case of a lost/forgotten PIN (**Email with the PIN reset code**). The templates are editable and the values can be reset to their defaults if needed, by clicking **Revert values**.

9.6. Editing user accounts

Each individual user has their own properties panel. To open the panel, double-click the user on the list on the **Users** main tab (or right-click the user, and then click **Edit**). The properties panel opens on the right side of screen.

The panel is divided into four tabs: **General**, **Groups**, **Queues** and **Delegates**.

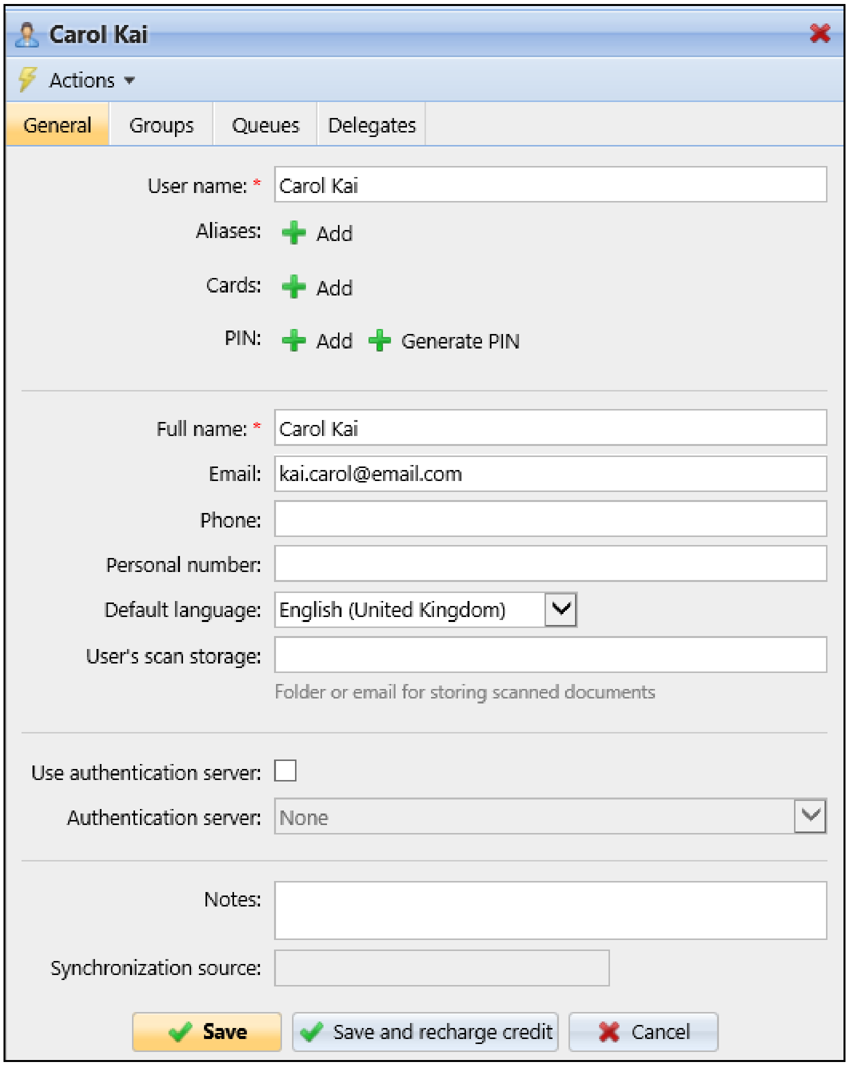


FIGURE 8.7. User properties panel

9.6.1. User information and settings

User name*	Here you can enter or change the user name. This entry is mandatory. It is unique and is used to identify the user. It is compared to the parameter obtained from the **User detection method**. For more information, see *"User detection method"* on page 182.
PIN	Here you can manually create or automatically generate new PIN code for the user and remove existing ones. Unlimited number of PINs can be added.
Full name*	Here you can enter or change the user's full name. This entry is mandatory.
Email	Here you can enter or change the user's email.
Default language	Here you can select the language of the user's sessions on MyQ embedded terminals.
User's scan storage	Here you can set the folder or email, where scanned documents are saved. For more information, see *"Scan Management"* on page 325.
Use authentication server	If you select this option, an LDAP server is used for the user authentication. The user uses their LDAP credentials to authenticate to MyQ instead of having a password set in MyQ. Select the domain for the authentication on the setting below.
Authentication server	Here you can select the LDAP domain for the user authentication.

9.6.2. Adding users to groups and removing them from groups

To add a user to a group on the device Groups tab, do the following:

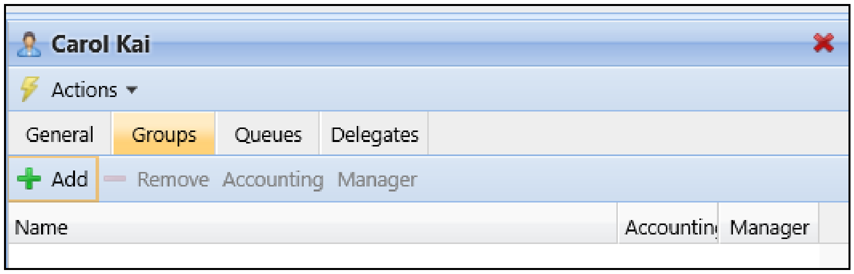


FIGURE 8.8. Adding users to groups on the **Groups** tab

1. On the bar at the top of the **Groups** tab, click **+Add**.
   The **Select group** dialog box appears.

2. In the **Select group** dialog box, select the groups where you want to add the user.

3. Click **OK**.

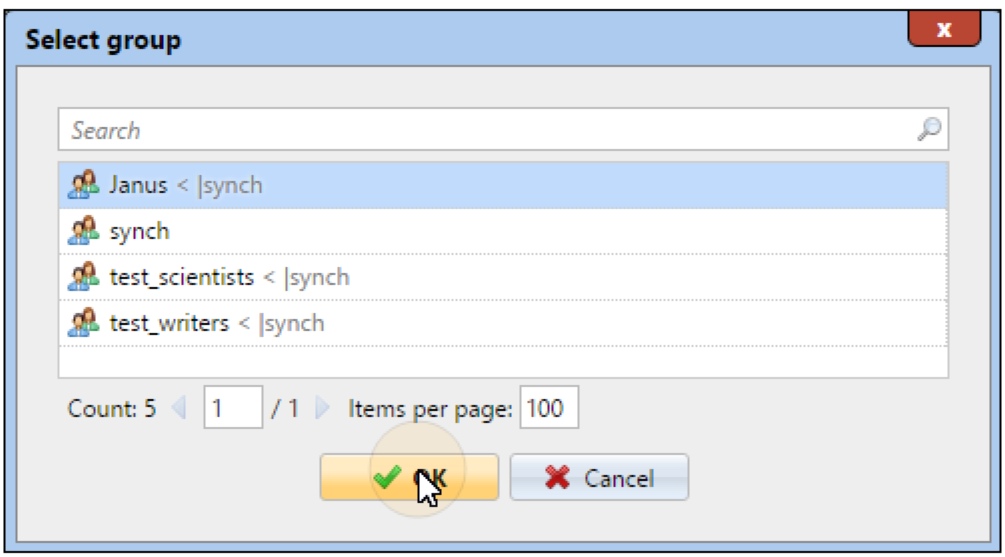


FIGURE 8.9. Selecting the group in the **Select group** dialog box

INFO: For more information about groups, see *"Groups of users"* on page 127

> **NOTICE:** To add a user to a group on the **Users** main tab using drag and drop, drag the user and drop it on the group icon on the groups tab on the left side of screen.

Default group and Group manager options

On the bar at the top of the **Groups** tab, you can see two options: **Accounting** and **Manager**.

The **Accounting** group is the group where the user is counted in reports (see *"Reports "* on page 287) and it is set by default.

If you make a user the **Manager** of a certain group, the user can see jobs and reports of all users from the group. To make the user a manager of a group, select the group and click **Manager**. For more information about reports, see *"Reports "* on page 287.

To remove a user from a group:

- On the bar at the top of the **Groups** tab, click **—Remove**. The group disappears from the **Groups** tab.

> **NOTICE:** To remove selected users from a group on the **Users** main tab, select the group there, select the users that you want to remove, click **Actions**, and then click **Remove from group** in the Actions drop-down box.

9.6.3. Overview of the queues to which the user has rights

On the Queues tab, you can see all queues where the user can send jobs.

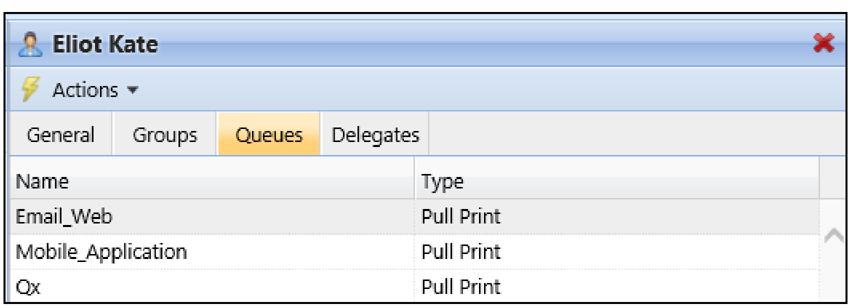
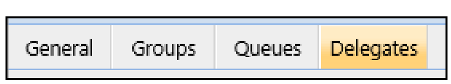


FIGURE 8.10. Overview of the queues

9.6.4. Selecting delegates for the user



On the delegates tab, you can select delegates (users or groups) who are able to print all of the delegating user jobs sent to a **Delegate printing** type of queue. The delegate will see the jobs on embedded terminal. The print jobs are displayed in the form: **(*Sending user**Name of the print job*)**. For more information about the delegate printing feature, see *"Delegated printing queue type"* on page 181.

> **NOTICE:** Users need to have rights to a delegate printing type queue to be able to select delegates.

To select the delegates:

- On the bar at the top of the **Delegates** tab, in the **Delegates** combo box, enter the user (or the group of users), and then click **Save**. This way, you can add multiple users (or groups of users).

To deselect a delegate:

FIGURE 8.11. Deleting the delegates from the Delegates tab

- On the bar at the top of the **Delegates** tab, in the Delegates combo box, point to the user (or group of users) that you want to deselect, and then click the remove button ( ) on the right side of the user (or group of users).

9.7. Enabling users to edit their profiles and to select their delegates

By default, all users can change their default language (see *"Default language"* on page 121) on their MyQ Web accounts and on some embedded terminals, while the rest of their properties can be changed only by the administrator. On the **Users** settings tab, you can provide users with additional editing options: you can enable them to change their full name and email and to select their delegates.

To enable users to change their full name and email, select the **Enable user profile editing** editing option.

To enable users to change their delegates, select the **Enable delegate changes** option. (See *"Delegated printing"* on page 221.)

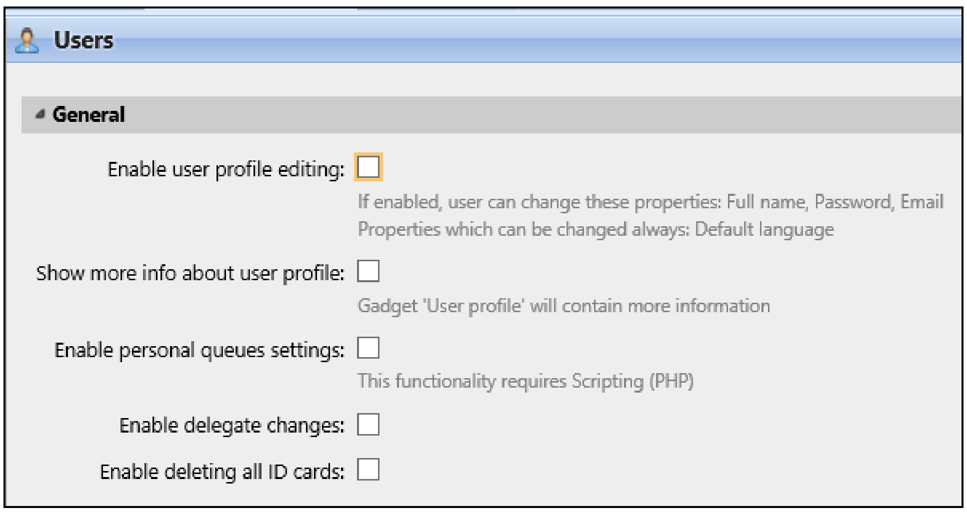


FIGURE 8.12. Users Settings - General options

INFO: Users open their profile management options by clicking **Edit** at the bottom-left corner of the **User profile** gadget on their MyQ Web accounts.

FIGURE 8.13. Opening the user profile settings

9.8. Groups of users

On the **Users** main tab, you can create new user groups. In MyQ, different groups of users can be given different access rights to print queues (see *"Queues "* on page 173), print functions, such as color printing or scanning (see *"Policies"* on page 130), and reports (see *"Reports "* on page 287).

Creating groups of users

To create a group, do the following:

1. On the group tab on the left side of the **Users** main tab, point on the group under which you want to create the new group.
   A drop-down box appears to the right.

2. On the drop-down box, click **+Add Group**.
   The new group properties panel opens on the right side of screen.

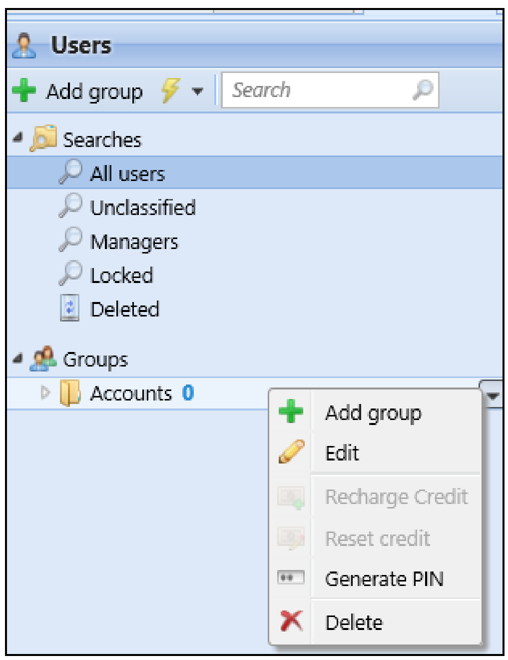


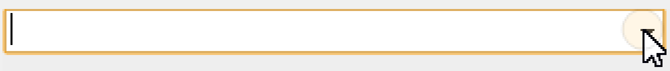
FIGURE 8.14. Adding a new sub-group

3. Enter a name for the new group.

4. Click **Save**.

To select delegates for the group, do the following:

1. Open the group properties panel by double-clicking on the group
2. On the bar at the top of the **Delegates** tab of the group properties panel, in the **Delegates** combo box, enter or select the user (or the group of users).
3. Click **Save**. This way you can add multiple users (or the group of users).

> **INFO:** To select a user or a group of users in the combo box, click the arrow on the right side. A drop-down box appears. In the drop-down box, on the list of users and groups of users, select the user or group.
>
> 

To deselect a delegate, do the following:

- On the bar at the top of the **Delegates** tab, in the Delegates combo box, point to the user (or group of users) that you want to deselect, and then click the remove button ( ) on the right side of the user (or group of users).

FIGURE 8.15. Deleting the delegates from the Delegates tab

Deleting groups

1. On the group tab on the left side of the **Users** main tab, right-click the group that you want to delete.
2. Click **Delete**.

9.9. Exporting users

In case you need to export the list of MyQ users to a CSV file — for example if you want to use the CSV file for user synchronization — you can do so on the **Users** main tab of the MyQ Web Interface.

To export the list of users, do the following:

1. Click **Tools** on the toolbar at the top of the **Users** main tab.
2. Click **Export** in the **Tools** drop-down box.
   The **Users Export** dialog box appears.

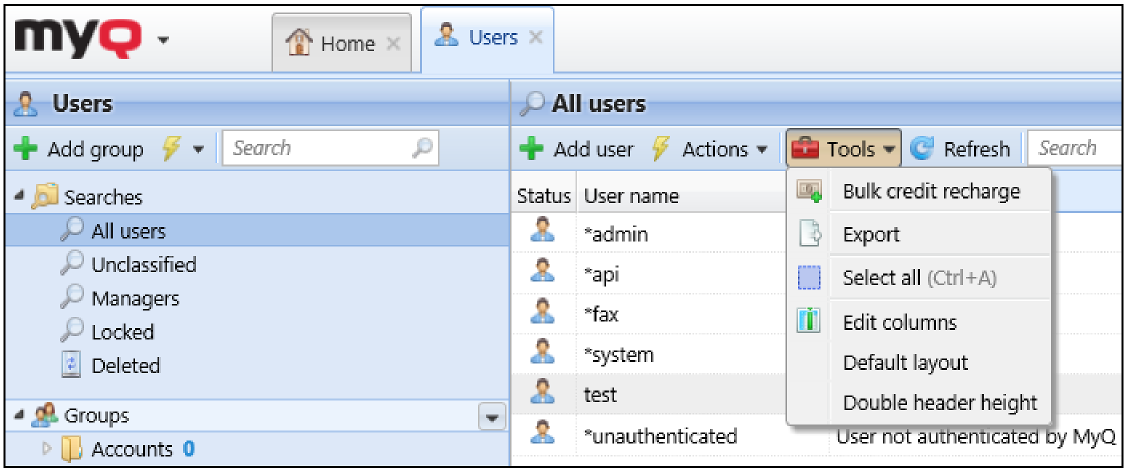


FIGURE 8.16. Exporting the list of users on the **Users** main tab

3. In the dialog box, select the group you want to export.
4. Click **OK**.

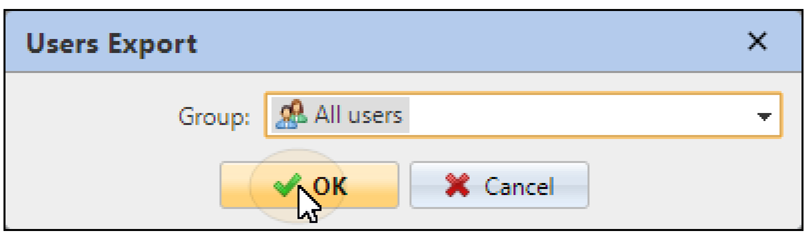


FIGURE 8.17. Selecting the group to be exported

INFO: The file is downloaded to the download folder set in your web browser.

9.10. Policies

The **Policies** settings tab is divided into two sections. The **Print job policies** section contains settings that apply to all print jobs, all printers and selected users or groups. The **Printer policies** section contains settings that apply to all queues, all print jobs, selected users (or groups) and selected printers.

Print job policies have the highest priority. Settings in the **Printer policies** section apply to all queues and all of the selected users, regardless of the settings of queues and print job policies.

Policies in both sections are listed in order of precedence: every policy has a higher priority than all the policies below it. If two policies are in conflict, the policy that is higher on the list applies. The default policy has the lowest priority and is always at the bottom of the list, other policies can be moved up and down the list by clicking the left or right arrow buttons on the **Policies** settings tab toolbar.

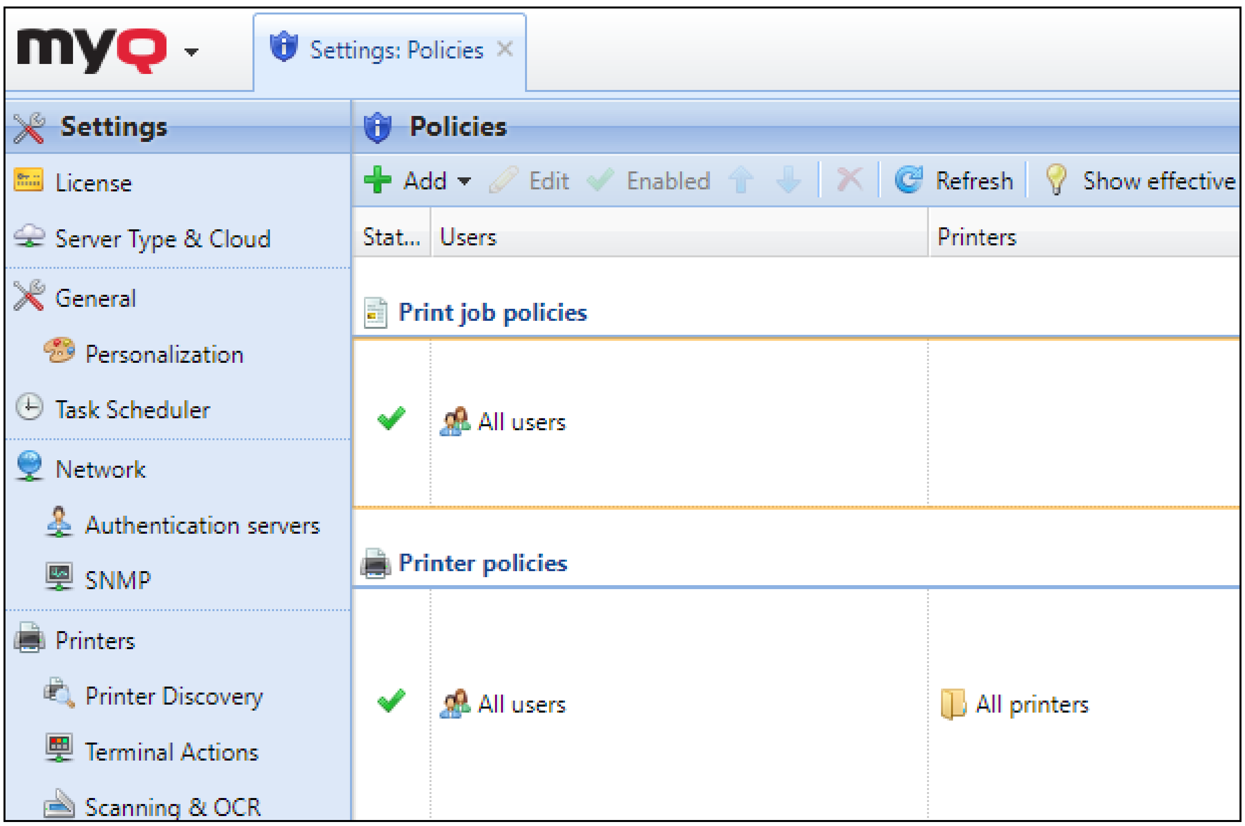


FIGURE 8.18. The **Policies** settings tab

9.10.1. Print job policies

> **NOTICE:** For each queue, you can disable print job policies by deselecting the **Force user policy** option on the queue properties panel, on the **Job processing** tab.

Print job policies settings

To open a print job policy properties panel, double-click the print job policy on the **Policies** settings tab list, under **Print job policies**.

Each print job policy panel is divided into four sections:

- In the upper section, you can enable or disable the policy, select the **Users and Groups** of users to which it will apply to, and add the policy **Description**.
- In the **General** section, mark the checkbox to be able to modify the setting and choose *Yes/No* if you want to **Keep jobs for reprint**.
- In the **Job Settings Defaults** section mark the checkboxes to be able to modify the below settings:
  - **Color**: *Do not change, Color, B&W*
  - **Duplex**: *Do not change, Simplex, Duplex long edge, Duplex short edge*
  - **Staple**: *Do not change, No Staple, Upper left corner, Booklet, Lower left corner*
  - **Punch**: *Do not change, No Punch, 2 holes, 3/4 holes*
  - **Toner saving**: *Do not change, No, Yes*
- In the **Permissions** section mark the checkboxes to be able to modify the settings and you can choose whether to *Allow* or *Deny* them:
  - **Change color**
  - **Change duplex**
  - **Change staple**
  - **Change punch**
  - **Change toner saving**
  - **Change copies**

Click **Save** and your new Print job policy appears in the **Policies** list.

Default print job policy

The **Default policy** applies to all users and has no restrictions. Except for its name and scope, all the settings of this policy can be changed.

You can restore the default settings by clicking **Restore defaults** on the top-left corner of its panel.

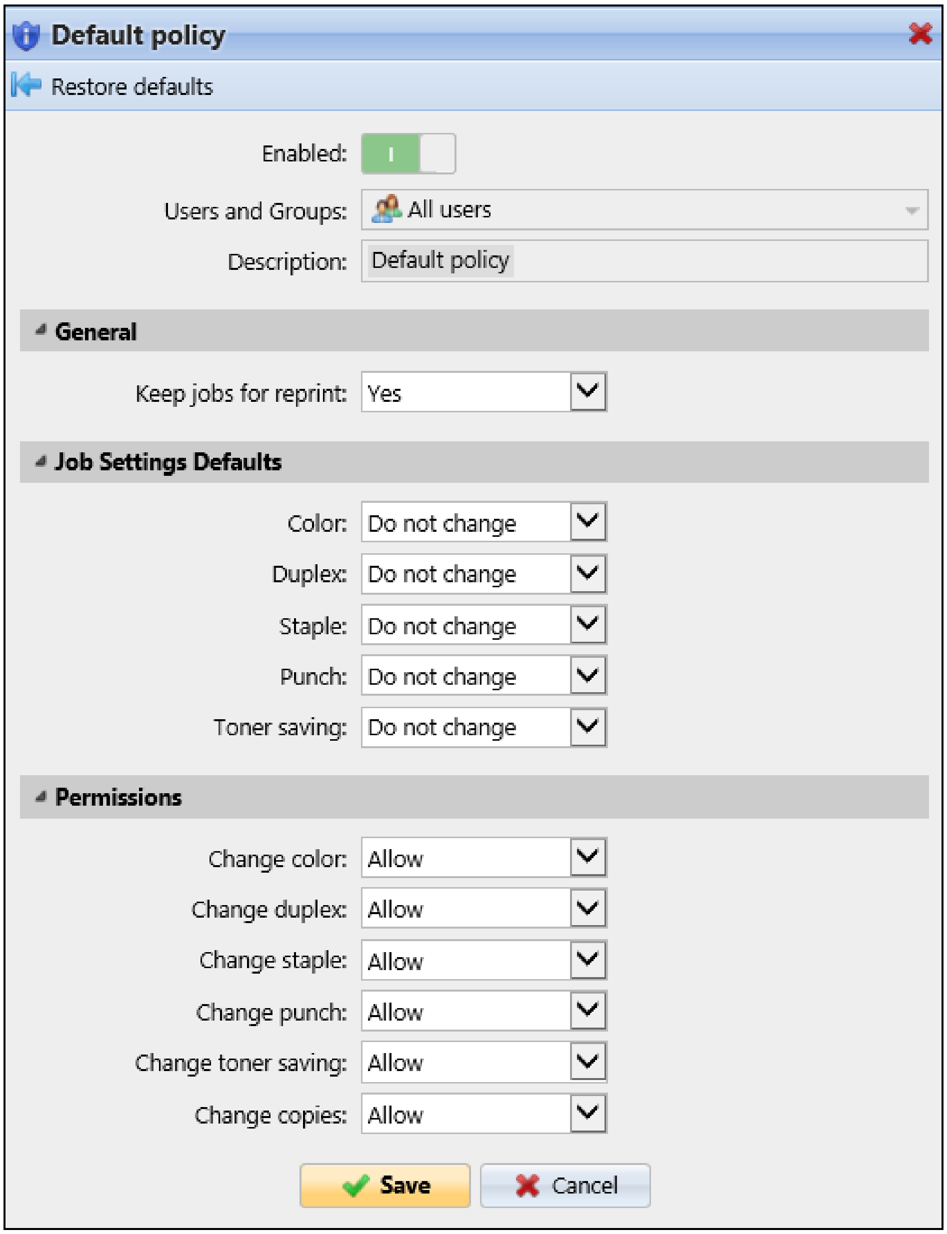


FIGURE 8.19. Default **Print job policy** properties panel

Adding new print job policies

1. On the bar at the top of the **Policies** settings tab, click **+Add**, and then click **+Add print job policy**. The new print job policy properties panel opens on the right side of screen.

2. On the panel, select the users or group of users to which the policy will apply, optionally write description of the policy, change its settings, and then click **Save**. The new policy appears on the **Policies** setting tab, under **Print job policies**.

> **INFO:** With the **Keep jobs for reprint** setting set to *No* , users are not able to add their jobs to Favorites on their account on the MyQ Web Interface or on MyQ Embedded terminals and they cannot re-print old jobs on the embedded terminals either.

> **INFO:** With all the **Permissions** set to *Deny*, users are not able modify their jobs on the MyQ Embedded terminals.

9.10.2. Printer policies

Printer policies settings

To open a printer policy properties panel, double-click the printer policy on the **Policies** settings tab, under **Printer policies**.

Each printer policy panel is divided into three sections:

- In the uppermost section, you can enable, or disable the policy, select the users or groups of users to which it will apply, select the printing devices to which it will apply and write the policy description.

- In the **Allowed actions** section, you can restrict access to particular operations on the selected printing devices.

- In the **Other policies** section, you can provide users with administrator access to printing devices via embedded terminal menu. For some devices, this option is not supported.

Default printer policy

Default policy applies to all users, all printers, has no restrictions and gives users **User access** to embedded terminals. Except for its name and scope (It applies to all users and all printers.), all settings of this policy can be changed.

You can restore the **Default policy** default settings by clicking **Restore defaults** on the top-left corner of its panel.

Adding new printer policies

1. On the bar at the top of the **Policies** setting tab, click **Add**, and then click **+Add printer policy**. The new policy properties panel opens on the right side of screen.

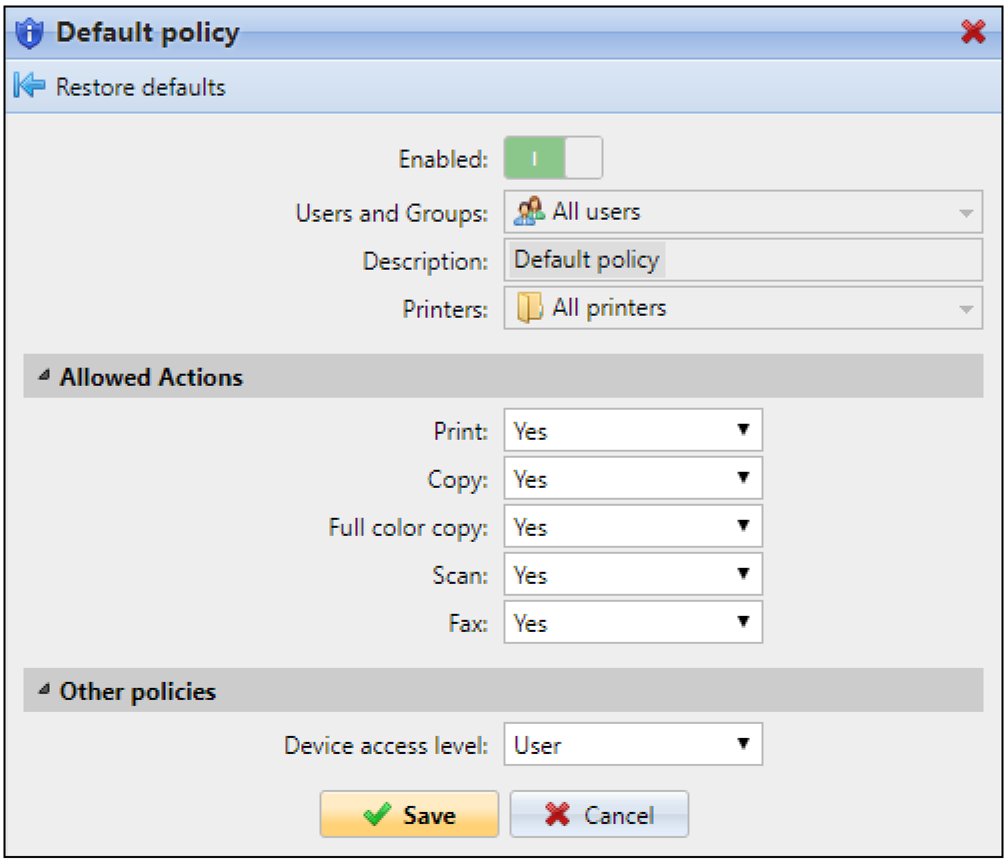


FIGURE 8.20. Default **Printer policy** properties panel

2. On the panel, select the users or group of users to which the policy will apply, optionally write description of the policy, change its settings, and then click **Save**. The new policy appears on the **Policies** settings tab, under **Printer policies**.

9.11. Rights

On the **Rights** settings tab, you can provide users or groups of users with administrator rights or provide them with rights to run one or more of the MyQ agendas: they can perform actions, change settings or see information that are inaccessible under a standard user account. On the tab, you can add users or groups and provide them with the rights.

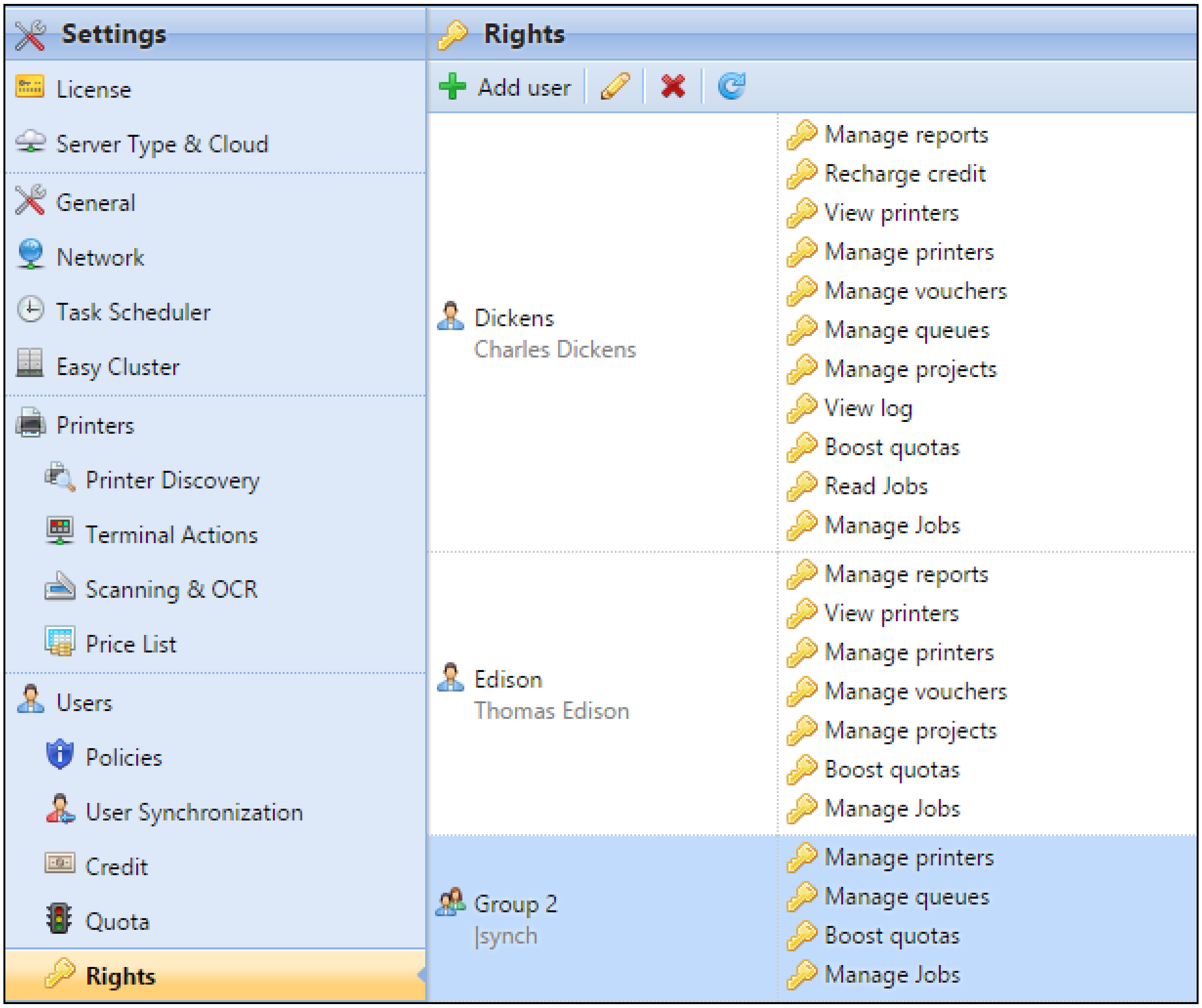


FIGURE 8.21. The **Rights** settings tab

9.11.1. Providing users and groups of users with rights

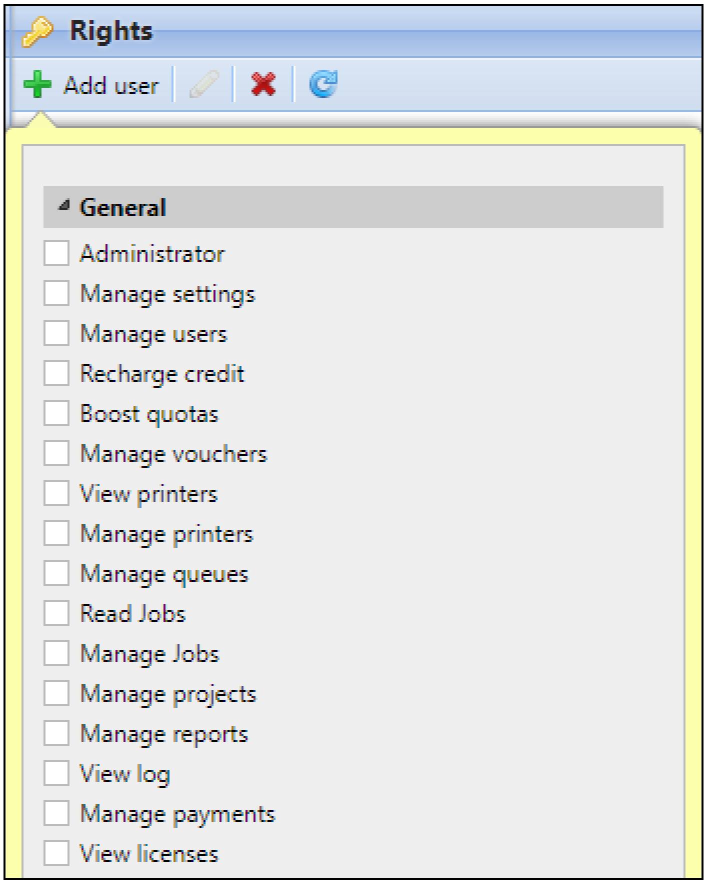


FIGURE 8.22. Providing users or group of users with rights

To add a new user or a group of users to the list on the Rights settings tab:

1. On the **Rights** setting tab toolbar, click **+Add User**.
   The **Select user or group** dialog box appears.
2. In the dialog box, select the user (or group),
3. Click **OK**.
   The new user (or group) properties panel opens on the left side of screen.
4. Select the user (or group) rights.
5. Click **OK**.
   The user (or group) appears on the list on the **Rights** settings tab.

9.11.2. Editing users' rights

To open the user rights properties panel (or the group rights panel), double-click the user (or the group) on the list of users and groups on the **Rights** settings tab. The panel appears on the left side of screen.

Each user rights panel is divided into two sections, in the **General** section, you can change rights concerning general run of MyQ. These rights are described in the table below.

Role	Rights
Administrator	The user is provided with administrator (*admin) rights.
Manage settings	The user gets access to management of all settings on the **Settings** tab of the MyQ Web interface except for the settings on the **Rights** tab.
Manage users	The user gets access to the **Users** main tab, the **Users** settings tab and the **Policies** settings tab, can add users and change their settings and rights.
Recharge credit	The user gets access to the **Recharge credit** main tab.
Boost quotas	The user gets access to the **Quota Boosts** main tab.
Manage vouchers	The user can get access to the **Voucher Batches** main tab.
View printers	The user gets access to the **Printers** main tab, to monitor printers.
Manage printers	The user gets access to the **Printers** main tab, to monitor printers and change their settings.
Manage queues	The user gets access to the **Queues** main tab and can change the settings there.
Read Jobs	The user can see other users' jobs.
Manage jobs	The user can edit other users' jobs.
Manage projects	The user gets access to the **Projects** main tab, can add projects and change their settings.

Role	Rights
Manage reports	The user can manage all reports.
View log	The user can view the MyQ log.
Manage payments	The user gets access to the **Payments** main tab.
View licenses	The user can view MyQ licenses on the **License** settings tab.

9.12. Securing the MyQ users personal data

Except for the data shown in MyQ reports, everything stored in MyQ is necessary for the functioning of the system. This data can be accessed only by people with administrator rights in MyQ and are not processed by the system or disclosed to third parties. As to the information shown in MyQ reports, it is fully under the control of the MyQ administrator, who can provide certain users with rights to view information related to other users or groups.

MyQ users can access their personal data within the MyQ system and upon their request, the MyQ administrator can erase the data by anonymizing the user. The following sections show how the users can access the data and how to anonymize the users.

> **INFO:** These options are closely related to the General Data Protection Regulation (GDPR), which aims to protect personal data of EU citizens. For more information about how the GDPR is implemented in MyQ, contact MyQ Support.

Providing users with their personal data

On their MyQ Web accounts, the users can see the **User profile** gadget with the personal information stored in MyQ.

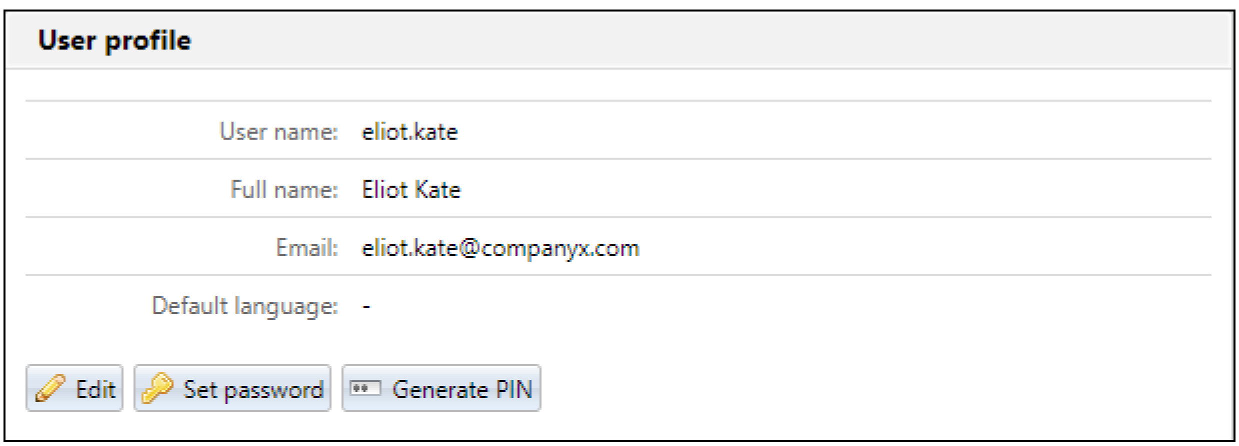


FIGURE 8.23. Information related to the MyQ user is displayed in the **User profile** widget

On their Web account, the MyQ user can generate reports related to their activity within MyQ, such as printing, copying and scanning to see what information is available in these reports. (See *"Reports "* on page 287.)

Users may also contact the MyQ administrator with the request to provide them with the data.

The MyQ administrator can create a custom message informing all users about the data protection options and include the admin email contact via the **%admin%** parameter (see *"Dashboard custom message "* on page 43) .

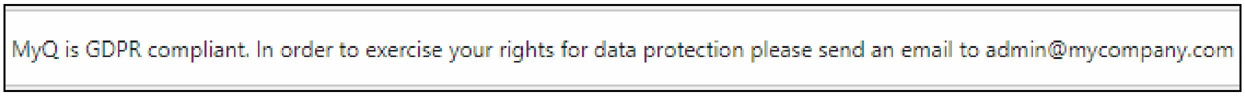


FIGURE 8.24. An example of the custom message that is shown on the MyQ Web account of each user

Anonymizing users

After the anonymization, the user is completely removed from the system and replaced by a randomly generated name in all of the relevant MyQ reports.

> **NOTICE:** After a user is anonymized, all of their personal data (including username and email) are erased from the system and cannot be retrieved.

To anonymize a user, do the following:

- On the **Users** main tab of the MyQ Web Interface, select the users that you want to anonymize, then click **Actions** (or select the users, and then right-click any of them), and finally click **Anonymize** in the users' actions dialog-box.

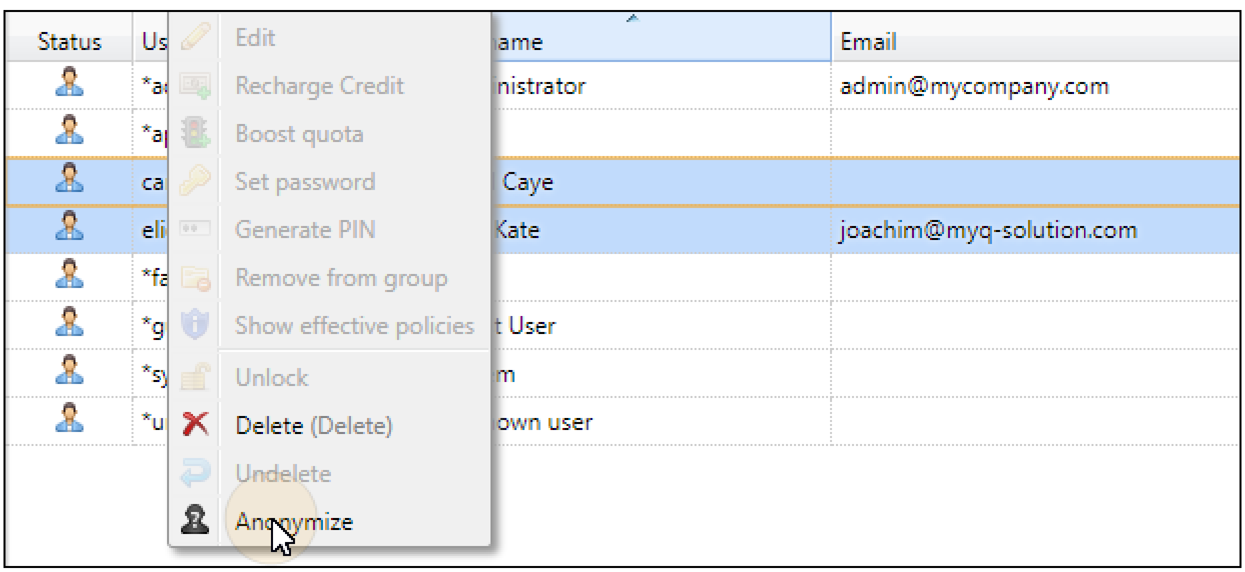


FIGURE 8.25. Deleting the selected user from the **All users** list on the **Users** main tab

9.13. User Import and synchronization

User synchronization is a method of synchronizing the user related data in the MyQ database with the data in external sources, such as LDAP servers or CSV files. Importing new users is an optional part of the synchronization process. Within the setup of the synchronization, you can activate or deactivate the new users import; if you deactivate it, MyQ only updates accounts of users that already are in its database.

This topic provides detailed information about the synchronization. It fully describes the two methods of import and synchronisation available in MyQ and presents two options of running the synchronizations:

- User synchronization from LDAP servers
- User synchronization from CSV files
- Manual and scheduled run of synchronizations

Furthermore, it shows you how to set up user synchronization from an Azure Active Directory:

- User synchronization from an Azure Active Directory

9.13.1. How does the user synchronization work?

First, you need to add the new synchronization source. Overall, there are four possible types of synchronization sources: LDAP server, CSV file, MyQ Central server and Custom script, but in this topic, we will discuss only the first two types. The synchronization from the Central server is used on the Central/Site server architecture installations of MyQ and is explained in *MyQ Central Server Installation Guide*. The synchronization from the custom script is used only in very specific cases; for information about this option, please contact your MyQ Support.

As soon as you add the synchronization source, MyQ opens its properties panel where you can set it up. Although they differ in their sources, all synchronizations have one thing in common, their goal is to adequately synchronize the user data in the source with the users' data in MyQ.

An important part of the synchronization setup is pairing user attributes in the synchronization source with their counterparts in MyQ. This can be done by setting the corresponding properties in the **Properties** section of the **Users** tab of the **LDAP synchronization** settings tab or by defining the corresponding fields in the CSV file.

Apart from that, you might want to select some additional options, such as adding new users, deactivating users that are not in the synchronization source, or converting user names to lowercase. These options can be selected in the **Options** section of the **Users** sub-tab of the **LDAP synchronization** settings tab or on the properties panel of the CSV synchronization.

Also, you can import groups of users or even whole group tree structures. This can be done by setting the groups on the **Groups** sub-tab of the **LDAP synchronization** settings tab or by defining the groups inside the CSV synchronization file.

The following two sections describe the user properties and synchronization options:

User properties in MyQ

- **User name**: Name of the user account in MyQ, in Active directory and Open LDAP, this property corresponds to the **samaccountname** user attribute on the LDAP server.
- **Full name**: This is the full name of the user, in Active directory and Open LDAP, this property corresponds to the **cn** user attribute on the LDAP server. Usually, it is the given name and the surname of the user.
- **Alias**: In addition to their user name, each user can have a number of aliases. MyQ treats the aliases as alternative user names. You can use aliases for example if you need to enable one user to send jobs to MyQ from different OS accounts.
- **Card**: Number of the user identification card. It can be either imported from LDAP or added to MyQ on the properties panel of the user. Also, it can be registered by an administrator on a card reader connected to a USB slot or registered by the user on an embedded terminal.
- **PIN**: The MyQ personal identification number is used for access to MyQ Web Interface and MyQ terminals.
- **Personal number**: The personal number can be used as the user ID in MyQ. The primary ID is the **user name** property. If you select the **Pair by the personal number** property during the user synchronization, the personal number is used instead.
- **Email**: The user's primary email address.
- **Notes**: You can use this text box to enter additional notes concerning the user.
- **Language**: The language used on the user's MyQ Web Interface and their home screen on the embedded terminal.
- **User's scan storage**: You can select a folder or one or more email addresses where MyQ sends the user's scans. Depending on the scanning setup, scans can be sent here, to the user primary email set in the **Email** property text box, or to other sources defined in MyQ or entered by the scanning users.

User synchronization options

- **Deactivate missing users**: If you select this option, MyQ deletes users that are imported from the current synchronization source and that are not in the source anymore. To delete users that were added from different sources, select the **Ignore synchronization source** option together with this option.
- **Add new users**: If you select this option, MyQ adds new users from the current synchronization source. If you do not select it, MyQ updates the user accounts of the users who are already in MyQ, but does not add any new users.
- **Convert user name to lowercase**: Unlike some other systems that do not differ between two words with the same letters but different cases (such as "Pear", "pear"), MyQ is case sensitive. You can use the **Convert user name to lowercase** option to prevent creating multiple accounts for one user.
- **Use authentication server**: If you select this option and a user logs in by entering their username and password, the credentials are not authenticated against the MyQ database, but instead against an LDAP or Radius server.If you synchronize users via LDAP, the source LDAP server is automatically assigned as the authentication server. If you synchronize users via CSV, you can select the authentication server from the list of predefined authentication servers.
- **Pair by the personal number**: If you select this option, MyQ identifies users by their personal number instead of their user names. This way you can keep track of a single user with different names in different sources or a user whose name has changed for some reason. For example, if this option is activated and a username in LDAP changes from cat.stevens to yusuf.islam, MyQ does not create a new user account, but recognizes the old user by their personal number.

- **Ignore synchronization source**: If this option is not selected, MyQ recognizes two users from different synchronization sources as two different entities. This can cause conflicts during synchronizations from multiple sources. If it is selected, MyQ ignores the synchronization sources and treats all users the same, regardless of their synchronization source. For example, if you run a synchronization and MyQ would import/update a user that has been already added from a different synchronization source, it does not update the user. Instead, it shows the message **"The name/alias "X" is already used by the user "X"** among the synchronization results. After you select the **Ignore synchronization source** option, the user is updated by the latest synchronization.

  > **NOTICE:** If you select this option together with the **Deactivate missing users** option, all users that were added from different sources and are not in the current synchronization source are deleted during the synchronization.

- **Append the domain name to the username (username@domain.local)**: With this option selected, the name of the domain can be retrieved from the MyQ username. The information about the domain may be needed for example, when scaning to users' home folders is used on an embedded terminal. (For more information about this feature on a particular embedded terminal, see the embedded terminal's MyQ manual.)

9.13.2. User synchronization from LDAP servers

LDAP server contains a database that stores all user accounts, passwords and other user related data of an organization. On the LDAP Synchronization settings tab on the MyQ Web Interface, you can synchronize users directly from the server database.

MyQ can communicate with as much as five LDAP servers at the same time). It supports Active Directory, OpenLDAP, Novell and Lotus Domino. To synchronize the users, you need to add the synchronization source first and then setup the synchronization. After the synchronization is set up, you can either run it manually on the **User Synchronization** settings tab or set it as a regular task on the **Task Scheduler** settings tab.

> **INFO:** All settings described in this section apply only to Active Directory, although the settings for OpenLDAP, Novell and Lotus Domino are similar.

INFO: OpenLDAP, with its default settings, limits the number of returned entries and the maximum total time for a query. The default size limit is 500 entries and the default time limit is one hour. In case of a larger customer installation with OpenLDAP, you must adjust these limits appropriately in the OpenLDAP settings, otherwise the user sync will give incomplete results.
For more details see: https://www.openldap.org/doc/admin24/limits.html

Creating an LDAP synchronization

NOTICE: Before creating the synchronization, you have to add the LDAP server to MyQ. You do this on the **Network** settings tab, under **Authentication servers**. Set **Security** to *SSL* and the server port to *636*.

Creating the new LDAP synchronization consists of the following steps:

1) Add the new synchronization

I. On the **User synchronization** settings tab, click **+Add Sync source**. A drop-down box appears.

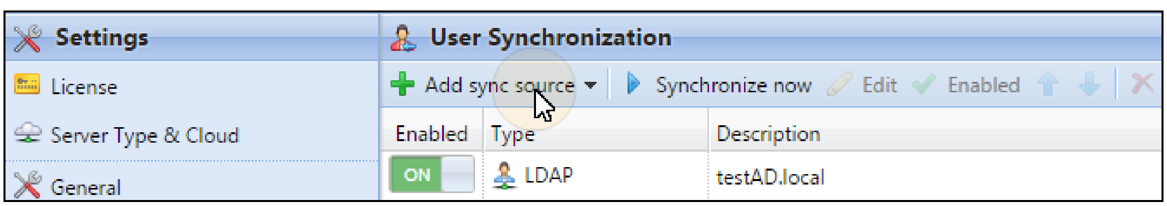


FIGURE 8.26. Adding new synchronization source on the **User Synchronization** settings tab

II. In the drop-box, click **+Add LDAP source**. The **LDAP synchronization** properties panel opens. On the panel, you can set up the synchronization.

2) Set up the synchronization on the LDAP synchronization properties panel

- Set up the synchronization on three tabs on the **LDAP synchronization** properties panel. On each of the tabs, click **Save** after changing the settings. For information about the synchronization setup, see *"Setting up the LDAP synchronization "* on the next page.

INFO: The synchronization is created when you save the settings on the **General** tab of the **LDAP synchronization** properties panel.

3) Return to the User synchronization settings tab

- The new LDAP synchronization is displayed on the list of synchronizations on the **User synchronization** settings tab.

Setting up the LDAP synchronization

The setup consists of three parts: creating the synchronization on the **General** tab, setting import of users on the **Users** tab and setting import of groups on the **Groups** tab. You can swap between these tabs on the bar at the upper-left corner of the **LDAP synchronization** properties panel.

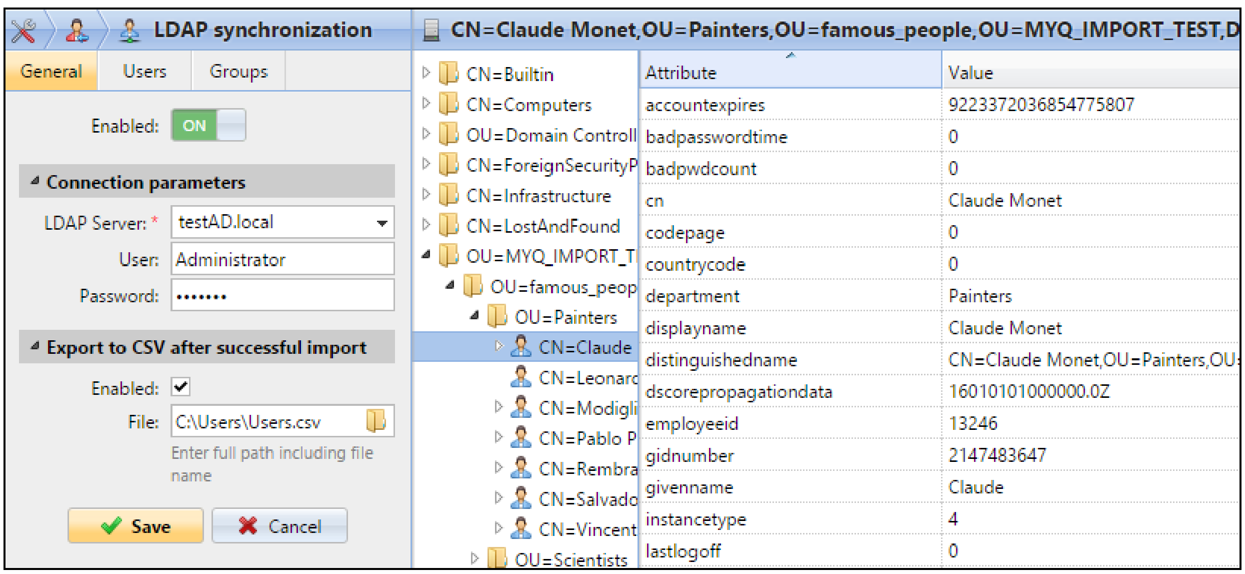


FIGURE 8.27. LDAP synchronization properties panel with the LDAP database browser to its right side.

For a detailed description of the LDAP synchronization setup and its options, see the three following sections: *"1) General tab: Creating the synchronization"* below, *"2) Users tab: Selecting base DN, assigning attributes and additional settings"* on page 148 and *"3) Groups tab: Importing groups"* on page 151.

1) General tab: Creating the synchronization

On the **General** tab, set the general properties of the synchronization: enable or disable the synchronization, select the LDAP server domain, enter user name and password for access to the server, eventually select to export the imported users to a CSV file. See the list below for description of individual settings.

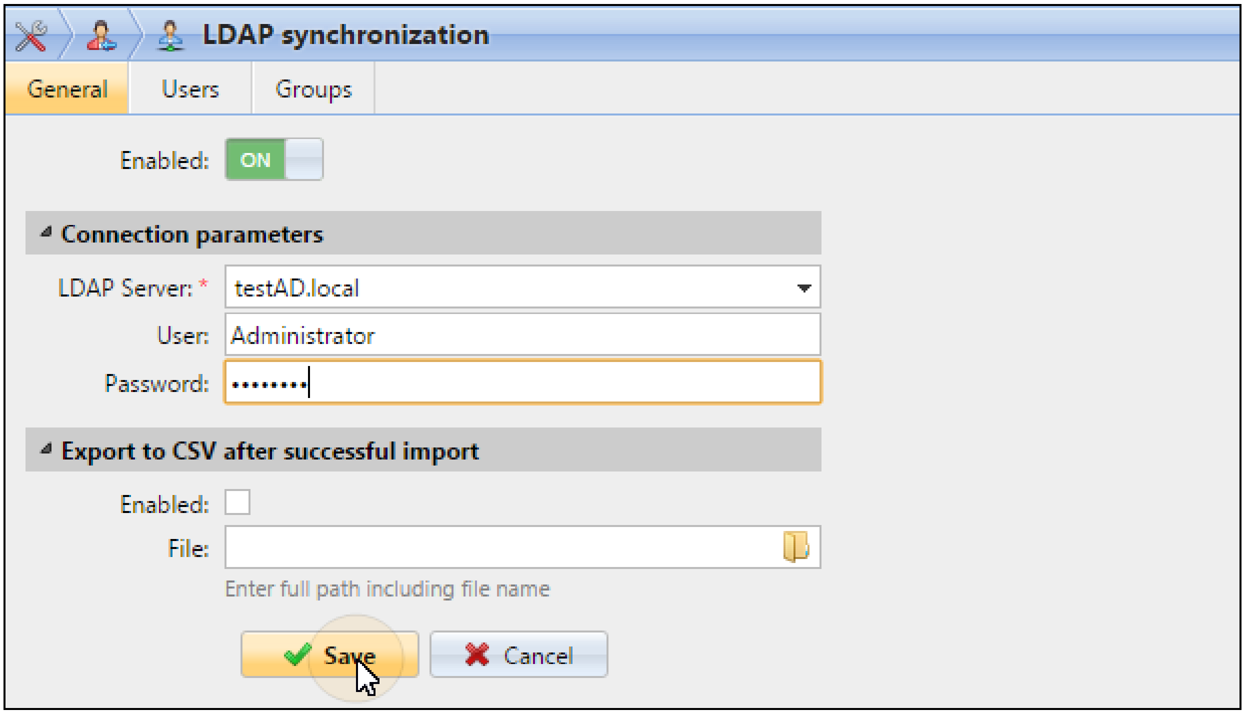


FIGURE 8.28. Saving the settings on the **General** tab

Enabled: Here you can enable or disable the synchronization.

Connection parameters:

LDAP Server: Here you can select the domain from which you want to synchronize.

User: Enter user name for access to the LDAP domain server here.

Password: Enter password for access to the LDAP domain server here.

Export to CSV after successful import:

Enabled: If you enable this option, MyQ creates a CSV file with the imported users after the synchronization.

File: Select the folder where you want to save the created file.

INFO: After you correctly set the connection parameters (LDAP server, username and password) and save the settings, the LDAP browser opens on the right side of screen.

2) Users tab: Selecting base DN, assigning attributes and additional settings

On the **Users** tab, pick one or more base DNs (distinguished names) from which you import the users. In addition, you can assign user attributes from the LDAP server to user properties in MyQ and select additional options concerning the synchronization.

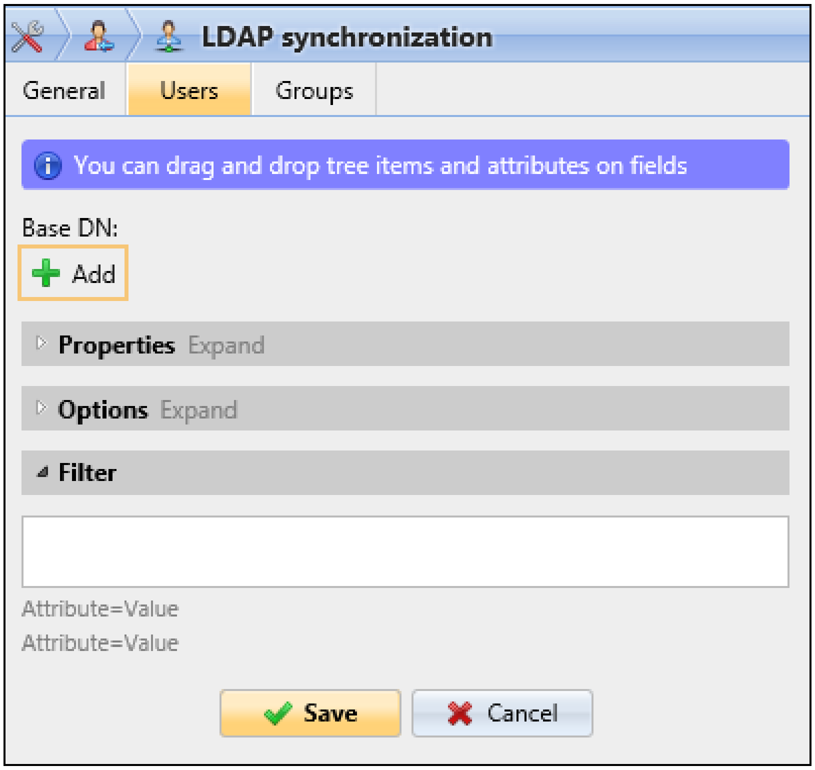


FIGURE 8.29. The **Users** tab on the LDAP synchronization properties panel

> **INFO:** During the setup, you can use the **drag and drop** feature to move items and attributes from the LDAP browser to corresponding text boxes on the tab on the left.

The settings of the users import are described in the following part of this section.

Base DN:

Here you can pick the base domain or domains from which you import users.

Click **+Add** to add a text box for the new base DN, and then drag a group from the database browser and drop it in the text box. You can add multiple domains this way.

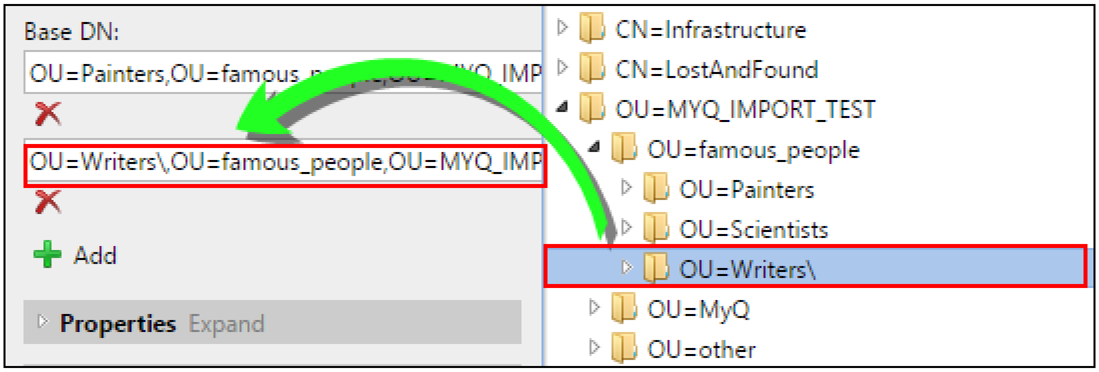


FIGURE 8.30. Dragging and dropping a domain

Properties:

These are the properties of every individual user. MyQ will automatically find and assign the user's **SAM account name** to **user name**, **cn** to **full name** and **mail** to **Email** (this applies to Active directory and OpenLDAP only). The user name property is the only one that cannot be changed.

To assign an attribute to a property, write the name of the attribute in the property text box or drag it from the attributes of any individual user and drop it in the text box.

The following properties support adding multiple values to them, separated by a semicolon (;):

- Alias
- PIN
- Card

For example, in the Alias property, you could add *alias1;alias2;alias3*.

WARNING: The AD attribute name should not contain the semicolon (;) character. If a semicolon is part of the attribute's name, that attribute will not be synchronized in MyQ.

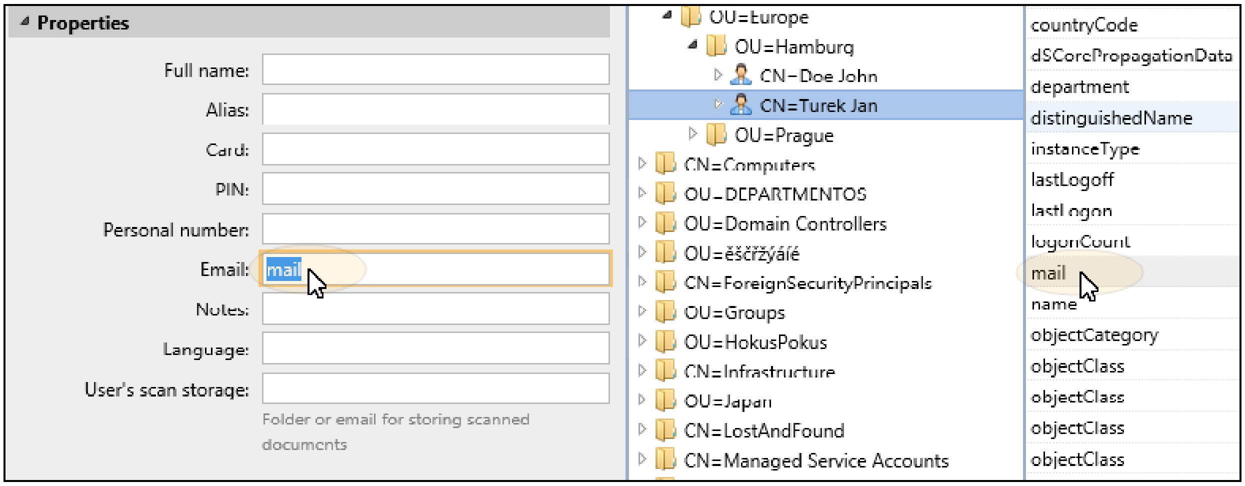


FIGURE 8.31. Dragging and dropping an attribute

For assigning default languages of users, you have to use an attribute from the LDAP server which has abbreviations of languages as its values. For example, you can create and use an attribute called **lang** with values **en** for English, **hr** for Croatian etc. The list of the abbreviations used in MyQ can be found here.

Options:

For a description of the common synchronization options, see *"User synchronization options"* on page 143.

In addition to the basic options that are common for both the synchronization from LDAP servers and for synchronization from CSV files, there is one specific option that belongs only to the import from LDAP servers: **append the domain name to the username (username@domain.local)** . This option enables you to save the information about the LDAP server in the user name. For more information about this option, contact your MyQ support.

Filter:

You can filter the import of users by specifying values of attributes. Add the conditions in form: **Attribute=Value**. Users with different value of this attribute are not accepted and are filtered out of the import.

For atributes where the values are strings, such as the cn or or You can use the * symbol to search for substrings. The symbol can be appended from both sides. For example, if you add a cn=*in* condition, only users whose common name attribute contains "in" are accepted.

Add one condition per one raw. Users are accepted if they satisfy at least one condition.

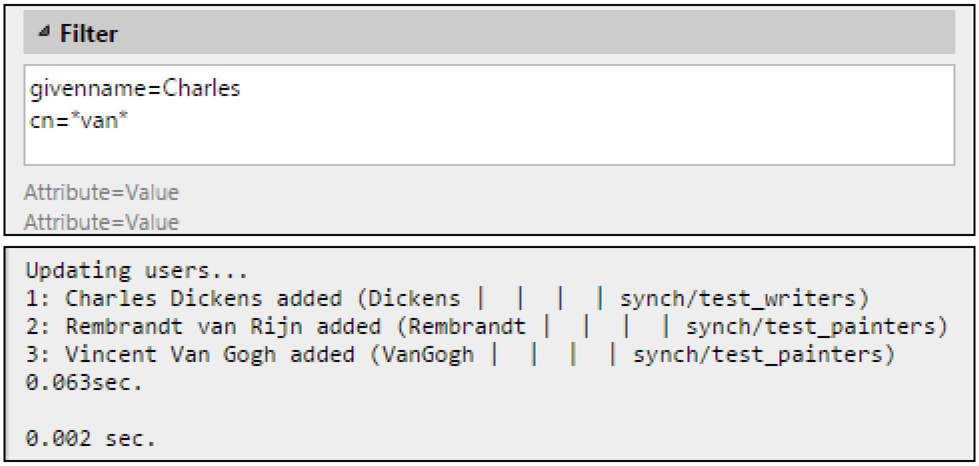


FIGURE 8.32. Example of a filter and the resulting synchronization

NOTICE: After you change the settings, click **Save** to submit the changes.

3) Groups tab: Importing groups

On this tab, you can import groups and the group structure from the LDAP source. There are four different methods of specifying which groups are imported. You can use multiple different methods together and by each method, you can create different groups of users. You can also select to import the groups under an existing group in MyQ.

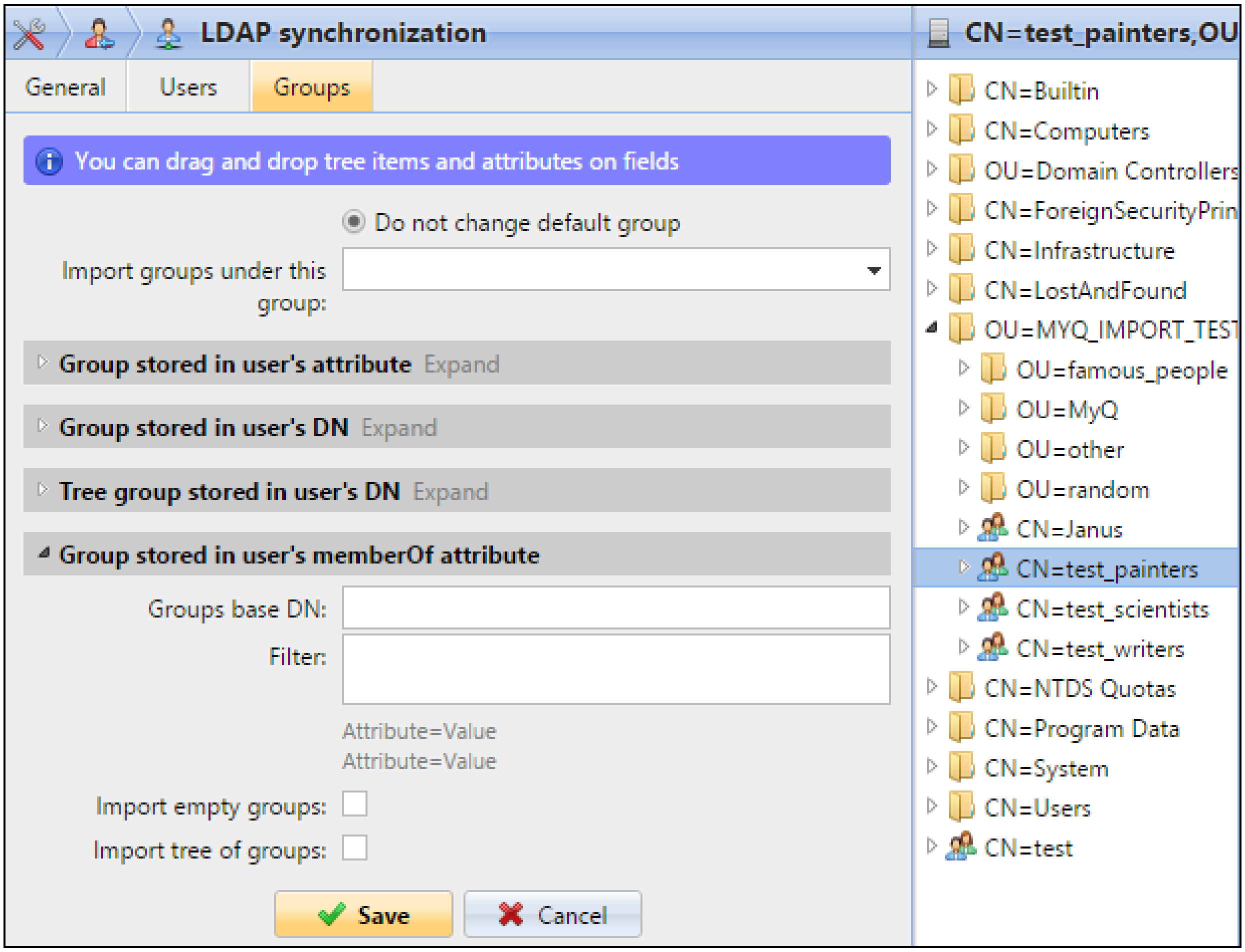


FIGURE 8.33. The **Groups** tab on the LDAP synchronization properties panel

The groups import options are described in the list starting on the next page.

Do not change default group:

A user can be member of multiple groups but all theirprints, copies and scans are accounted to only one group: the **Default group** of the user.

If you select this option, the default group of the selected user does not change during the synchronization.

Import groups under this group:

You can select an existing group in MyQ under which you import the groups from the LDAP database.

Groups stored in user's attribute:

Attribute: You can select this option if you want to use an attribute that defines groups in the LDAP database.

To add the attribute, type the name of the attribute in the property text box or drag the attribute from the attributes of any individual user and drop it in the **Attribute** text box.

FIGURE 8.34. Dragging and dropping an attribute

You can also create groups by combining multiple attributes. To create such group, put each of the attributes between two percentage signs (%). For example, the combination of attributes **%attribute1%_%attribute 2%** , imports a new group named **value1_value2**.

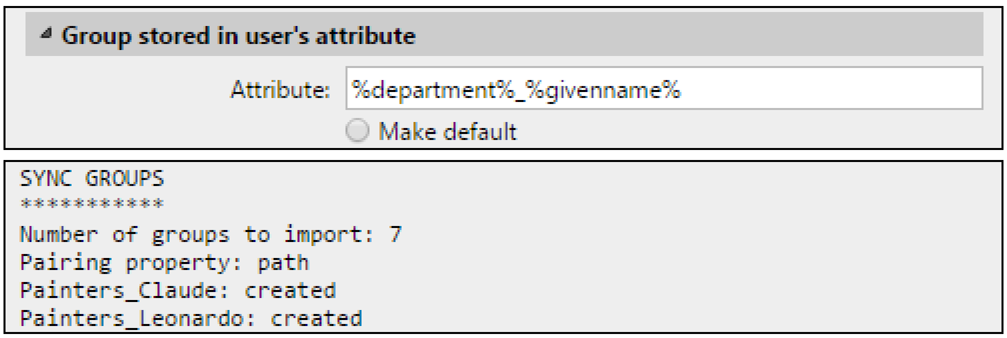


FIGURE 8.35. Example of a combined attribute group definition and the resulting synchronization

Furthemore, you can create tree structures of groups by separating the attributes with vertical bars. For example, the combination of attributes **%attribute1%|%attribute 2%**, imports a group attribute1, and its sub-group **attribute 2**.

Make default: If you select this option, the group becomes the default group of the imported user.

Group stored in user's DN:

OU component index: Here you can select a group by its OU (organizational units) index among the DN components. The index is counted from right to left: the first OU group from right has index 1, the second from right has index 2 and so on.

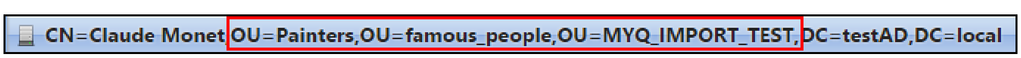


FIGURE 8.36. DN Components with three OU groups (Painters, famous_people and MYQ_IMPORT_TEST)

On the picture above, there are three OU groups: **MYQ_IMPORT_TEST** has index 1 (as it is the first OU group from right), **famous_people** has index 2 and **Painters** has index 3. The other components are not OU and therefore have no index.

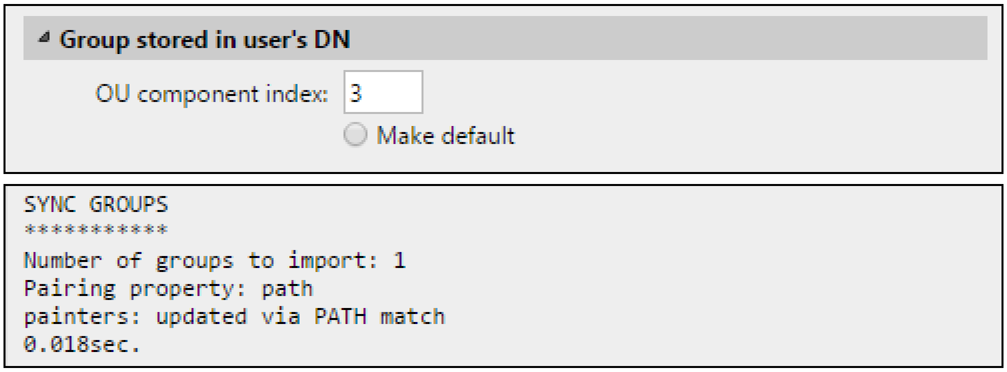


FIGURE 8.37. Example of an import of a group stored in user's DN

Make default: If you select this option, the group becomes the default group of the imported user.

Tree group stored in user's DN:

Here you can import the whole tree structure of groups. You can restrict the import to any part of the structure by striping the DN components from left and from right. In the respective text boxes, enter the amount of components to be striped from left and from right side.

You have to strip at least one component from left (the user CN component) and one component from right (the right-most DC component).

FIGURE 8.38. DN Components

On the picture above, there are six components. If you strip one component from left and one from right, you import the following structure of groups: **testAD > MYQ_ IMPORT_TEST > famous_people > Painters**.

By stripping components from left, you remove the groups from bottom to top of the structure. By stripping components from right, you remove the groups from top to bottom of the structure.

Make default: If you select this option, the bottom group of the imported structure becomes the default group of the imported user.

<u>Group stored in user's memberOf attribute</u>:

Group base DN: MyQ can import security and distribution groups stored in the user's **memberOf** attribute. The security groups are used to define access permissions granted to their members. Distribution groups can be used for sending emails to a group of users.

To specify which groups should be taken in consideration during the import, you have to insert the groups base DN. MyQ import only groups that are included in the base DN, other groups stored in the memberOf attribute are ignored. The group base DN does not have to be the same organizational unit as the users base domain.

If a user is member of more than one group on the LDAP server, all the groups are stored in the **memberOf** attribute. Therefore, the **Make default** option, which requires a single value, is not available for this method of import.

To add the groups base DN, drag it from the database browser and drop it in the **Group base DN** text box.

Filter: You can filter this import by specifying values of attributes. Add the conditions in form: Attribute=Value. Groups with different value of this attribute are not accepted and are filtered out of the import. You can use the * symbol to search for substrings. The symbol can be appended from both sides. For example, if you add a cn=*in* condition, only users whose common name attribute contains "in" are accepted. >Add one condition per one raw. Groups are accepted if they satisfy at least one condition.

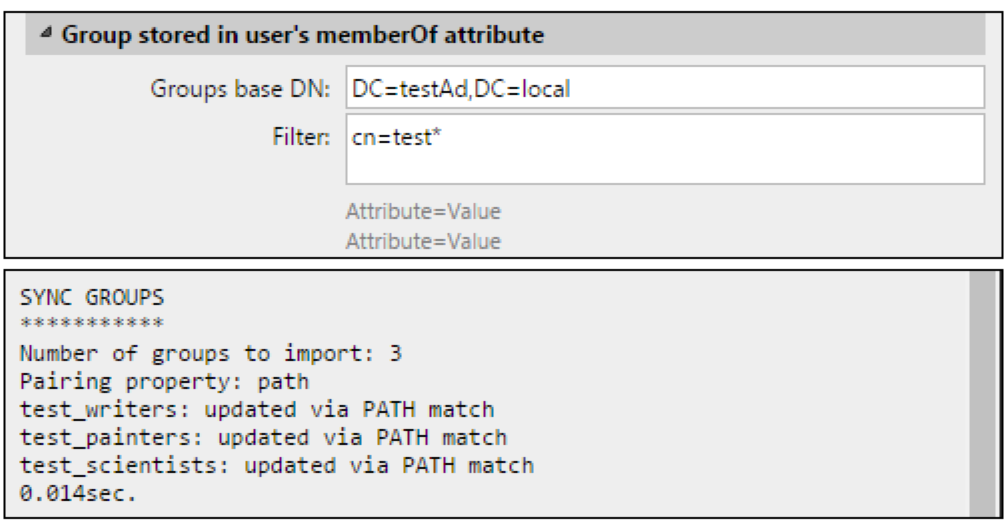


FIGURE 8.39. Example of an import of groups stored in memberattribute with the **cn=test*** filter applied

Import empty groups: If you select this option, groups from the Group base DN are imported even if there is no user having them in their memberOf attribute.

Import tree of groups: If you select this option, the whole tree structure is imported. Otherwise all groups are added separately; not as a part of a tree structure.

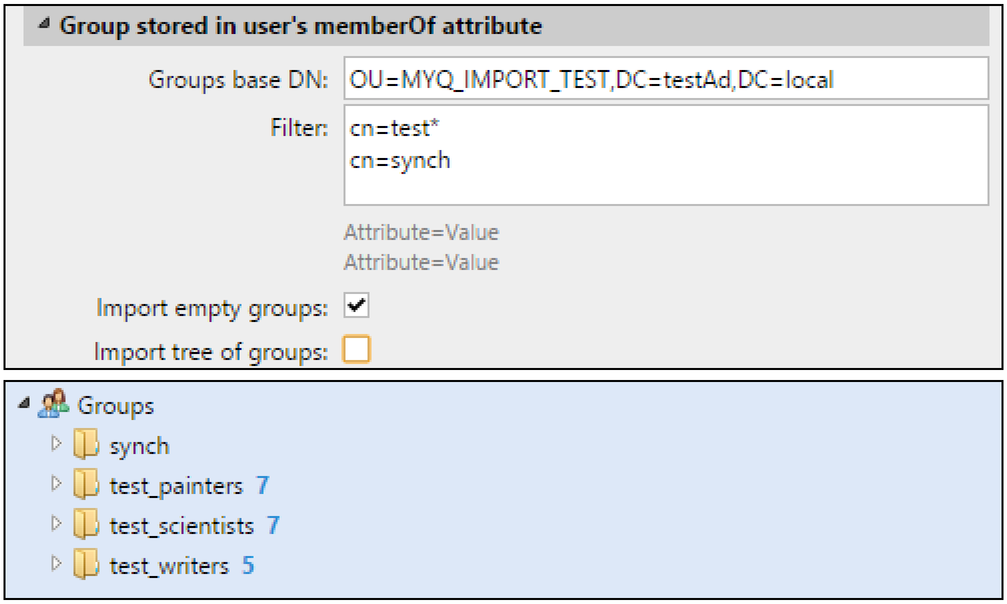


FIGURE 8.40. Import of groups stored in memberOf attribute with the **Import tree of groups** option deselected

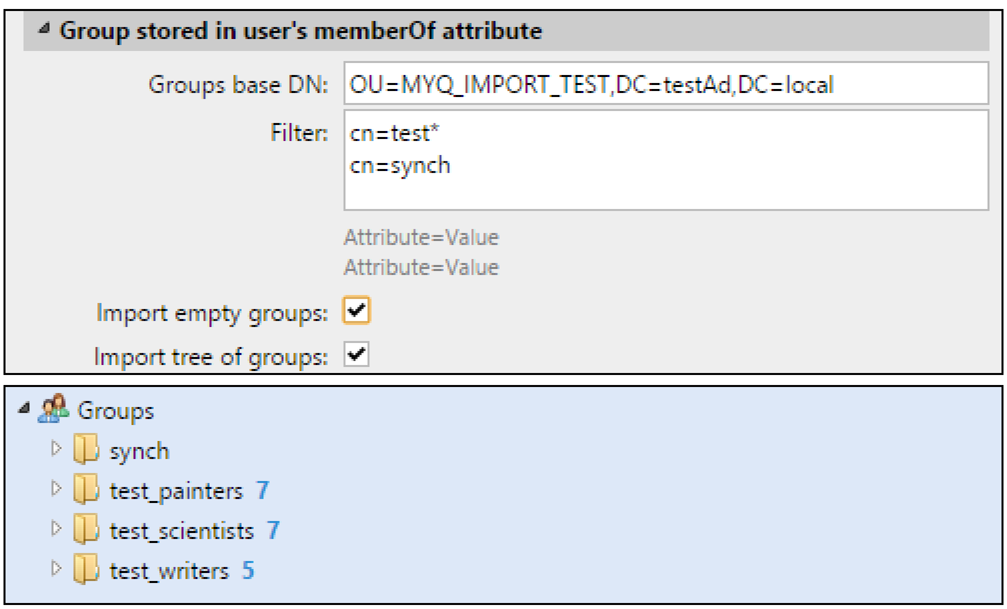


FIGURE 8.41. Import of groups stored in memberOf attribute with the **Import tree of groups** option selected

9.13.3. User synchronization from CSV files

To synchronize users from a CSV file, you have to create a new CSV synchronization on the **User Synchronization** settings tab and on the synchronization properties panel, add the source file and set properties of the synchronization.

After the synchronization is set up, you can either manually run it on the **User Synchronization** settings tab or set it as a regular task on the **Task Scheduler** settings tab.

Creating new CSV synchronization

To create a new synchronization, do the following:

1) Open the new synchronization

- On the bar at the top of the **User synchronization** setting tab, click **+Add Sync source**, and then click **+Add CSV source**. The **CSV synchronization** properties panel appears on the right side of screen.

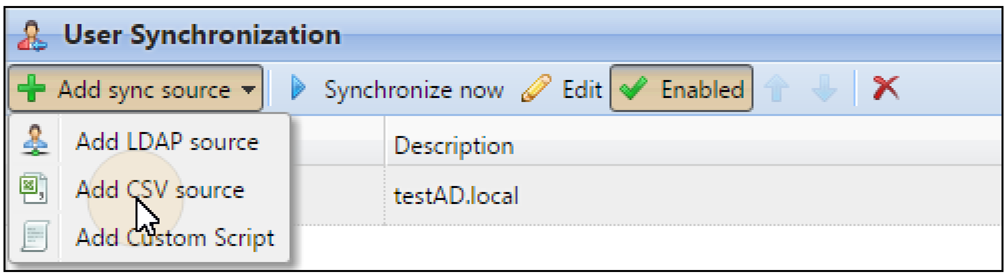


FIGURE 8.42. Adding new synchronization source on the **User Synchronization** settings tab

2) Set up the synchronization

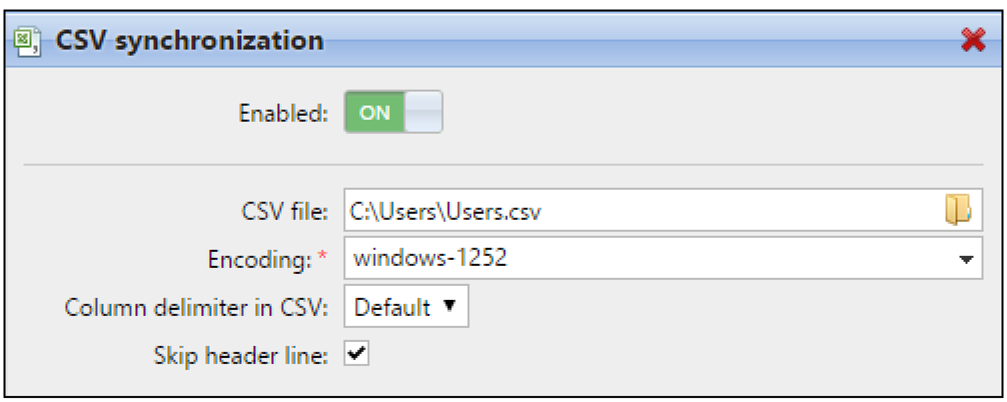


FIGURE 8.43. The **CSV synchronization** properties panel

- On the **CSV synchronization** properties panel, set the path to the CSV file and configure the synchronization. For information about the synchronization options, see *"CSV synchronization setup options"* below.

3) Save the setup

CSV synchronization setup options

These are the options of the CSV synchronization:

Enabled: Here you can enable or disable the synchronization.

CSV file: Here you can set the path to the CSV file on the MyQ server.

Encoding: Select the encoding that is used in the CSV file. The default value depends on the OS settings of the computer on which you access the MyQ Web Interface.

Column delimiter in CSV: Select the delimiter that is used in the CSV file.

If you select the **Default** option, MyQ scans for the delimiter set on the **Column delimiter in CSV** drop-down list box on the **General** settings tab.

Skip header line: In case the CSV file contain a header line, you need to select this option and skip the first line of the file during the synchronization. All lists of users exported from MyQ contain the header line.

Import groups under this group: Here you can select an existing group in MyQ under which you import the groups from the CSV file.

Synchronization source: Here you can specify a different source than the CSV to be marked as the synchronization source by the MyQ system. For example, you can insert an LDAP server domain.

Ignore synchronization source: If you select this option together with the **Deactivate missing users** option, all users that are not in the current synchronization source are deleted.

Use authentication server: If you select this option, an LDAP or Radius server is used for authentication of the imported users.

Select the domain for the authentication on the setting below.

Authentication server: Here you can select the LDAP or Radius domain for the user authentication.

Deactivate missing users: If you select this option, MyQ deletes users that are imported from the current synchronization source and that are not in the source anymore.

To delete users that were added from different sources, select the **Ignore synchronization source** option together with this option.

Add new users: If you select this option, MyQ adds new users from the current synchronization source.

Pair users by personal number: If you select this option, multiple accounts with a single personal number are paired.

Convert user name to lowercase: If you select this option, all letters in user names are converted to lowercase.

Cards / PIN / Groups / Delegates: In each of the three mandatory drop-down boxes, you can select from these synchronization options for the respective parameter (CARDS, PINS, GROUPS):

- Do not synchronize: Value of the respective parameter in MyQ is not changed.
- Full synchronization: Value of the respective parameter in MyQ is always replaced by the value in the CSV file. If the value in the source file is empty, the value in MyQ is erased.
- Synchronize if not empty: If the respective field in the CSV file is not empty, the parameter value in MyQ is replaced by the value in the CSV file. Otherwise, the parameter value remains unchanged. **This is the default setting.**
- Add new: If the parameter is already set in MyQ, it is not replaced. Only new values are added.

Syntax of the CSV file

```
"FULLNAME";"USERNAME_ALIASES";"EMAIL";"CARDS";"GROUPS";"CODE";
"SCANSTORAGE";"PIN";"MANAGED_GROUPS";"AUTHSERVER";"PHONE";
"LANG";"PWD";"EXTID";"DELEGATES"
"Thomas Pinapple";"Tom,Tomy,Apple";"t.pinapple@domain.com";
7E9700C9;"Imported Users,Activities|Outdoors|Swimming,
Activities|Outdoors|Birdwatching";22212;"\\Users\Tomy";
14BFA6BB14875E4;Birdwatching;testAD.local;080008020;en;
ldapAuth;;"Carol,Kohei,Eliot";
```

FIGURE 8.44. CSV file opened in a text editor

In thelist below, you can find information about individual fields of the CSV file.

NOTICE: A single word or a plain number can be put in the CSV fields as they are, while more complex strings, such as full name or email address, have to be bounded by quotes.

FULLNAME: Name of the user in double quotation marks, for example **"Thomas Pinapple"**.

USERNAME_ALIASES: Login of the user and eventually their aliases.

The login should be the same as the user's domain login name, for example **Tom**.

When you import multiple aliases, separate them with commas, for example **"Tom, Tomy, Apple"**.

EMAIL: Email of the user, for example **"t.pinapple@domain.com"**.

CARDS: Number of the user's authentication card/chip. It has to be inserted in the form in which it is read by the card/chip reader, for example **7E9700C9**.

GROUPS: Here you can add user groups.

You can import a whole branch of the groups tree structure. The groups on the imported branch have to be separated by vertical bars.

If you want to import multiple groups (or groups tree branches), separate them by commas.

For example, if you add two branches separated by a comma: **"Activities|Outdoor|Swimming, Activities|Outdoor|Birdwatching"**, MyQ imports a single parent group **Activities** with a single child group **Outdoor**, with two child groups **Swimming** and **Birdwatching** . (Activities>Outdoor>Swimming, Birdwatching)

NOTICE: Commas and vertical bars cannot be used in group names as they are used as group delimiters.

CODE: The personal number of the user. The ID number must be unique for each user.

This parameter is very useful when using multiple sync sources.

SCANSTORAGE: The folder or email where the user wants their scans to be sent, for example **"\\Users\Tomy"**.

For more information about scanning, see Scan Management .

PIN : You can define one or more PINs to be assigned to users within the synchronization process. It is not absolutely necessary as PINs may also be generated later within the setup of the user account. The PINs should be in the hashed MD5 format, for example **14BFA6BB14875E4**.

MANAGED_GROUPS: You can make the user manager of a particular group by adding the group or path to the group here in the way in which you would import the group. If you want the user to be a manager of a child group, enter a whole branch ending with this group.

For example, enter the branch **"Activities|Outdoor|Swimming"** to make the user a manager of the **Swimming** group. If there are no parents of the group in the group structure, enter just the group name, e.g. **Activities**.

> **NOTICE:** Commas and vertical bars cannot be used in group names as they are used as group delimiters.

AUTHSERVER: In this field you may define the domain for user authentication, for example **"testAD.local"**.

PHONE: The user's phone number, for example **080008020**.

LANG: Default language of the user, for example **en**.

PWD: If you want the user to be authenticated against an LDAP server, insert the parameter **ldapAuth**. If not, let this parameter undefined.

EXTID: '**EXTID**' is an internal MyQ parameter. This field has to be left empty.

DELEGATES: For each user, you can import any number of delegates.

If you import multiple delegates, separate them with commas, for example **"Carol,Kohei,Eliot"**.

For information about delegates in MyQ, see Delegated printing .

9.13.4. Manual and scheduled run of synchronizations

The synchronization can be manually run on the **User Synchronization** tab of the MyQ Web Interface, or it can be set as a scheduled task on the **Task Scheduler tab**. The two options are described in the sections below.

Manually running a synchronization

On the **User synchronization** setting tab, enable the synchronizations that you want to run, and then click **Synchronize now** on the bar at the top of the tab.

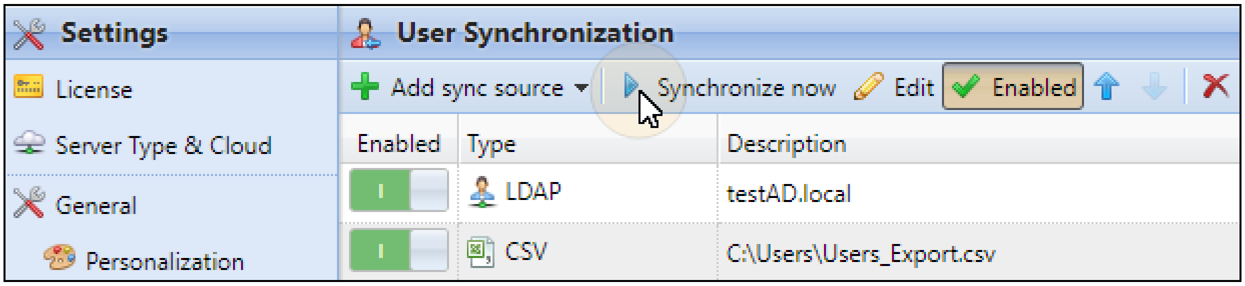


FIGURE 8.45. Manual run of the user synchronizations

Scheduled run of the synchronization

On the **Task scheduler** settings tab, you can setup a scheduled run of the synchronization. For more information about this option, see [Task scheduler](#).

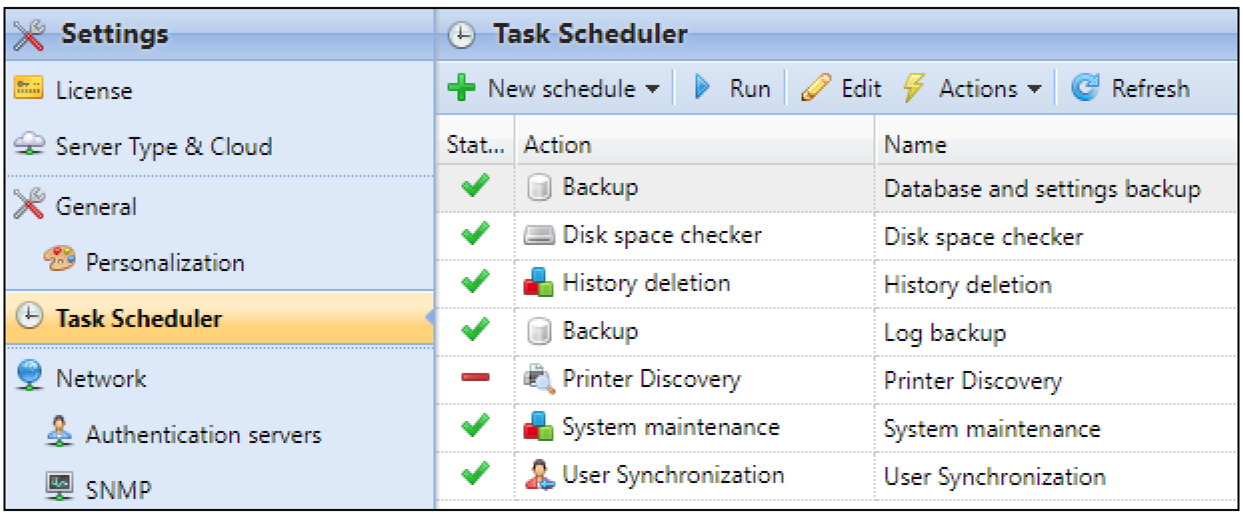


FIGURE 8.46. Scheduled tasks in MyQ

9.13.5. User synchronization from Azure Active Directory

Azure Active Directory is a service accessed from the Microsoft Azure Portal. It has to be enabled and configured in Azure Active Directory Domain Services.

Activation and setup of the service are described in the following Microsoft guides:

- To enable and configure Azure Active Directory Domain Services: https://docs.microsoft.com/en-us/azure/active-directory-domain-services/active-directory-ds-getting-started
- Configure Azure AD Domain Servers to use SLDAP: https://docs.microsoft.com/en-us/azure/active-directory-domain-services/active-directory-ds-admin-guide-configure-secure-ldap

After you activate the Azure Active Directory, you need to add it to MyQ and set up the synchronization in the standard way (see *"User Import and synchronization"* on page 140 and *"User synchronization from LDAP servers"* on page 144). When setting up the Authentication server in MyQ, you need to make sure that the LDAP server parameters are set to the following values:

- Domain = **DNS DOMAIN NAME** of the Azure AD Domain
- Security: **SSL**
- Server = **SECURE LDAP EXTERNAL IP ADDRESS** of the Azure AD Domain

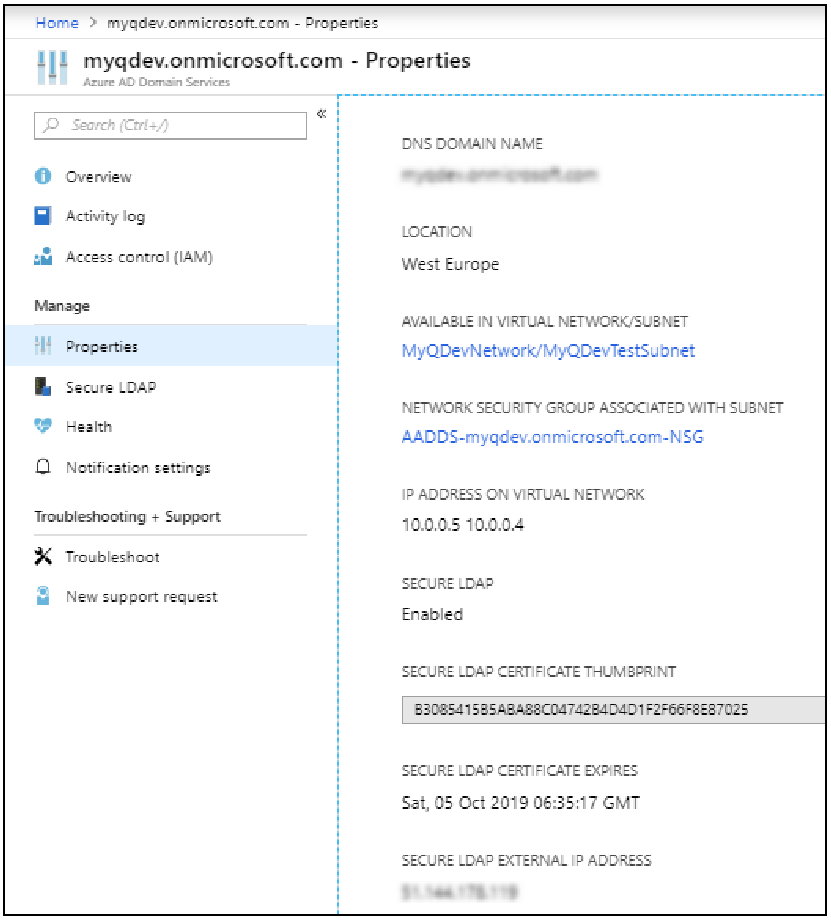


FIGURE 8.47. The relevant settings of the Azure AD Domain

9.14. Using External Authentication Servers for Authentication in MyQ

In addition to the internal MyQ authentication methods (password, PIN or ID card), you can use two types of external authentication servers: LDAP and Radius.

With the two external methods, MyQ does not use the internal MyQ PIN or password for user authentication, but instead authenticates users against an LDAP or Radius server. After the user enters their credentials during the authentication, the credentials are sent to be verified directly by the external server. If there is no online connection with the LDAP or Radius server, users cannot log in.

To enable this method of authentication, you have to take two steps: register authentication servers in MyQ and select to use them for authentication of users. The latter can be done automatically during the user import from an LDAP server or a CSV file or manually on the properties panels of individual users.

See: Adding LDAP or Radius server.

9.14.1. Setting the external user authentication option

There are two ways of setting the external user authentication option and assigning the servers to users. The first way is to select to use the external authentication option during the users import from an LDAP server or a CSV file. The second way is to manually select this option on the properties panels of individual users.

Automatically selecting the external authentication option

Importing users from a CSV file

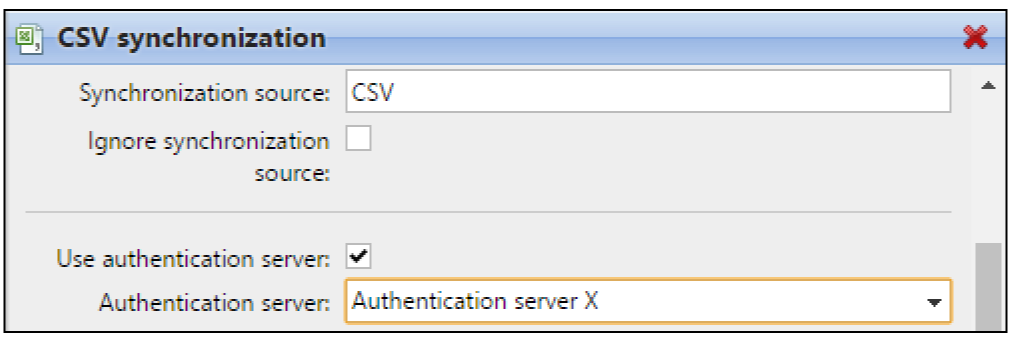


FIGURE 8.48. Selecting the authentication server for the users imported from the CSV file

When you import users from a CSV file, you have two options of selecting the authentication server for the users:

1. You can select the **Use authentication server** option and select the server during the synchronization setup on the synchronization properties panel.

2. You can specify the Authentication server for a particular user in the **AUTHSERVER** field of the CSV file. If the field is not empty, its value has priority over the value selected on the properties panel.

For more information about importing users from CSV files, see *"User synchronization from CSV files"* on page 156.

To enable the authentication option for users imported from an LDAP server

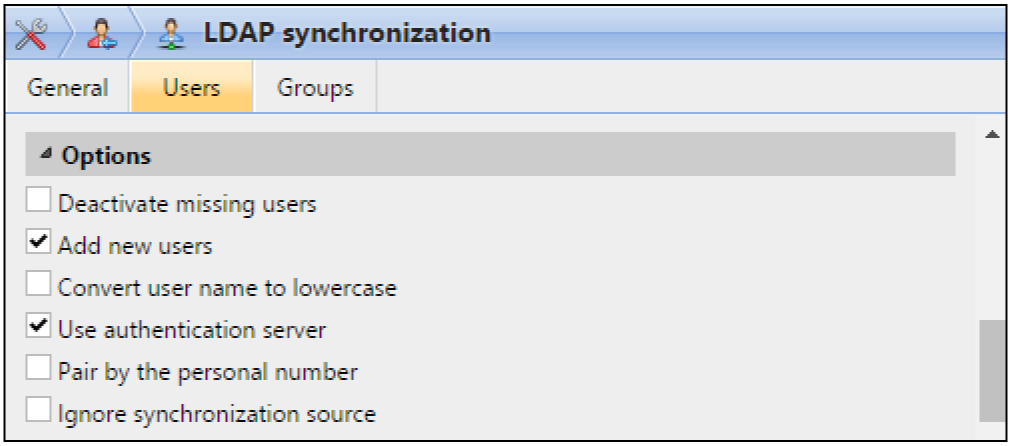


FIGURE 8.49. Selecting to authenticate the imported users from the LDAP server

During the import from an LDAP server, you can select the **Use authentication server** option, to use the current synchronization source server for users authentication. For information about importing users from LDAP servers, see *"User Import and synchronization"* on page 140.

INFO: Unlike the **Use authentication server** setting for the import from a CSV file, which allows you to select the authentication server, the **Use authentication server** setting here gives you a single option — users will be authenticated against the LDAP server where they are imported from.

Manually selecting the external authentication option

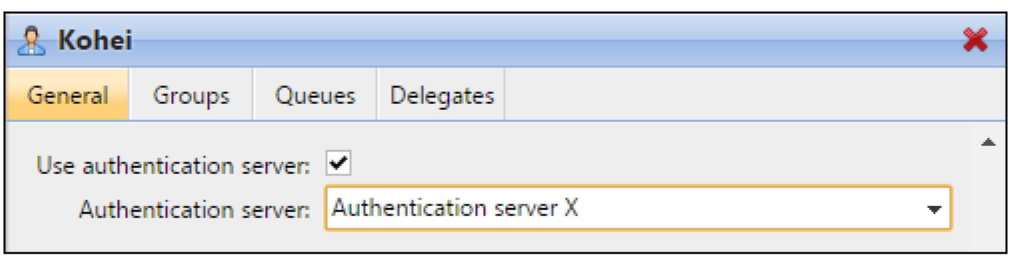


FIGURE 8.50. The Authentication server settings on the **General** tab of the user properties panel

To manually select the external authentication option

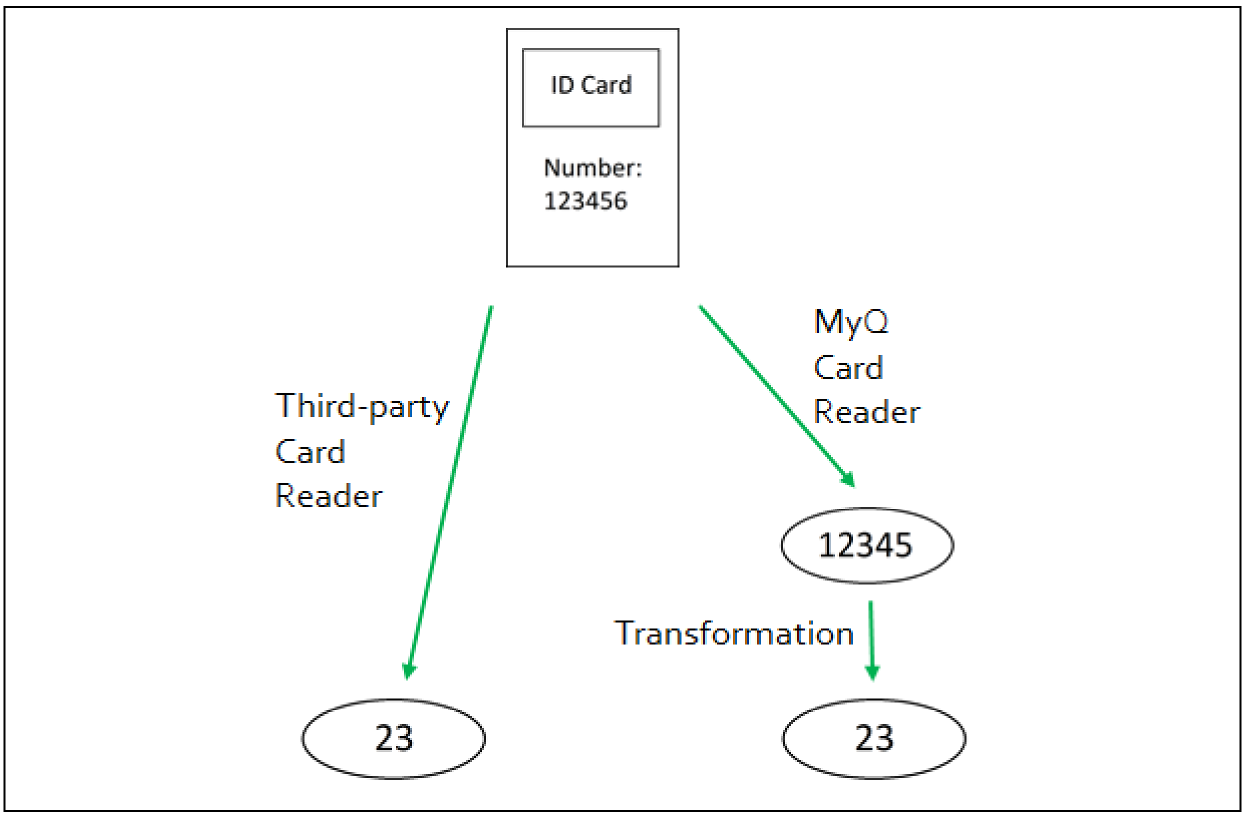
1. Open the **Users** main tab and double-click the user. The user's properties panel opens on the right side of screen.

2. On the panel, select the **Use authentication server** option. The **Authentication server** setting becomes available.
3. On the **Authentication server** drop-down box, select the server you want to use, and then click **Save** at the bottom of the panel.

10. ID Card Transformation

This topic discusses the ID Card transformation feature in MyQ. The transformation might be necessary if the customer needs to import card numbers from a third-party SW database and the card number format in this database doesn't match the format read by the MyQ card reader.

The third-party system card readers can give output in a different format than the card readers used in MyQ. In consequence, users card numbers imported from the third-party system can differ from the card numbers read by the MyQ card readers. To unify the format of the two outputs, you can define a specific sequence of commands that transforms the output of the MyQ card readers to the format used in the database of the third-party system.



INFO: With most of the MyQ card readers, you can use the card reader configuration software to set the format directly on the reader. However, it is simpler and faster to set one or two universal MyQ transformations than to separately change settings of each card reader.

How to setup the card transformation

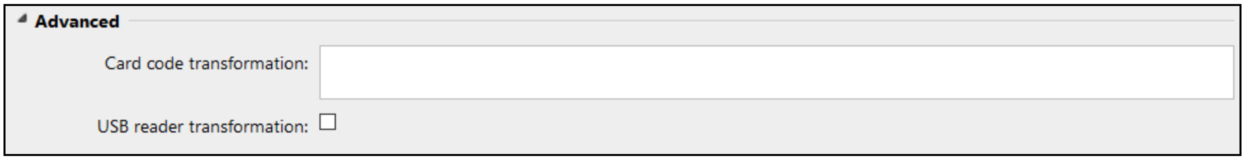


FIGURE 8.51. The **Advanced** section of the **Printers** settings tab

On the **Printers** settings tab, under **Advanced**, you can define and use a transformation for card readers and select to use it on a USB reader connected to the administrator PC. The USB reader can be used to recharge credit or associate cards.

Available options:

- **Card code transformation**: This transformation is used by Embedded terminals (with USB readers connected directly to the device) and by the reader for HW terminal that is connected as usually a primary reader.
- **USB reader transformation**: Check the box to apply the transformation to card readers connected to a PC USB slot. These card readers are usually used to recharge credit or to associate cards with user accounts.

Defining the transformation

You can define the transformation by adding commands from the table below. The commands have to be separated by semicolon (;) and are read and executed from left to right, for example in the transformation **CommandX;CommandY**, the **Command X** is executed first and the **Command Y** second.

All commands, except for the + command, are applied in the following way:

The first command of the transformation and each command immediately behind the **+** command are applied to the initial card number. All other commands are applied to the result of their predecessors.

For application of the + command, see the description in the Table of commands below.

Table of commands:

ltrim(number of characters) — Remove the first X characters from left.
ltrim(2): 123456 —> 3456

rtrim(number of characters) — Remove the first X characters from right (the last X characters).
rtrim(2): 123456 —> 1234
prepend(character string) — Add the string in front of the card number.
prepend(AB): 123456 —> AB123456
append(character string) — Add the string behind the card number.
append(AB): 123456 —> 123456AB
left(number of characters) — Select the first X characters from left (and remove the rest).
left(2): 123456 —>12
right(number of characters) — Select the first X characters from right.
right(2):123456 —> 56
mid(number of characters, number of characters) — Remove X characters from left, remove Y characters from right and leave the characters in the middle.
mid(2,2): 123456 —> 34
lpad(number of positions, symbol) — Complete the string to the length specified by the **number of positions** parameter by adding value of the **symbol** parameter to the left (in front of the card number).
lpad(12,0): 123456 —> 000000123456
hex2dec () — Transform the card number from hexadecimal mode to decimal mode.
hex2dec(): 1000AB —> 1048747

dec2hex() — Transform the card number from decimal mode to hexadecimal mode.
dec2hex(): 1048747 —>1000AB
hex2bin — Transform the card number from hexadecimal mode to binary mode.
hex2bin(): 1000AB —> 100000000000010101011
bin2hex — Transform the card number from binary mode to hexadecimal mode.
bin2hex(): 100000000000010101011 —> 1000AB
dec2bin — Transform the card number from decimal mode to binary mode.
dec2bin(): 100023 —> 11000011010110111
bin2dec — Transform the card number from binary mode to decimal mode.
bin2dec(): 11000011010110111 —> 100023
reverse() — Reverse the byte sequence, i.e. take all characters by two and reverse the order of the pairs. (The last pair goes first, the second last goes second etc.)
reverse(): 1234AB —> AB3412
reverseString() — Reverse the character sequence. (The last character goes first, the second last goes second etc.)
reverseString(): 1234AB —> BA4321
reverseNibbleBits() — Convert each character from hexadecimal mode to binary mode, reverse the character sequence of each quadruple and convert the result back to hexadecimal mode.
reverseNibbleBits(): 10AB —> 0001 0000 1010 1011 —> 1000 0000 0101 1101 —> 805D

upper(): Converts the string to upper case.
upper():Abcd —> ABCD
plugin(reference): Calls a card transformation plugin with the given reference.
This option enables using custom PHP scripts for the transformation. For more information about this option, contact your MyQ support.
asciiCode2ascii — Converts ASCII characters encoded as hex-digits to ASCII characters.
asciiCode2ascii(): 414F —> AO
"string 1" + "string 2" — Merges strings in front and behind this command. **"string 1"**: • Either the initial card number (if there are no commands preceding the **+** symbol), • or the result of the last command before the **+** symbol (if there are no + commands preceding the **+** symbol), • or the result of the previous **+** command. **"string 2"**: • Either the initial card number (if there are no commands behind the **+** symbol or if the next command is another **+** command), • or the result of the last command of the transformation (if there are no + commands behind the **+** symbol), • or the result of the last command before another **+** command.

Here is a tranformation example:

Card number: 10AB

Card code tranformation: hex2bin ();lpad (16,0);reverseString ();ltrim (8);reverseString ();bin2hex() + ltrim(4);lpad(4,10AB)

Result: 1010AB

Tranformation process:

("10AB" —>"1 0000 1010 1011" —> "0001 0000 1010 1011" —> "1101 0101 0000 1000" —> "0000 1000" —> "0001 0000" —> "10") + ("10AB"" —> "" —> "10AB") ==> "1010AB"

11. Queues

This topic discusses one of the key functions of MyQ — setup and management of print queues. It covers the following subjects:

- Overview, adding and deleting queues: List of queues, Adding queues, Deleting queues.
- Individual queues settings: Editing queues
- Description of different types of queues: Direct, Tandem, Pull Print and Delegated printing queue types
- Ways of detecting users: User detection method
- You can create collections of watermarks and associate them with the queues where they will be used: Watermarks
- Some extra options for queues: Advanced options of queues

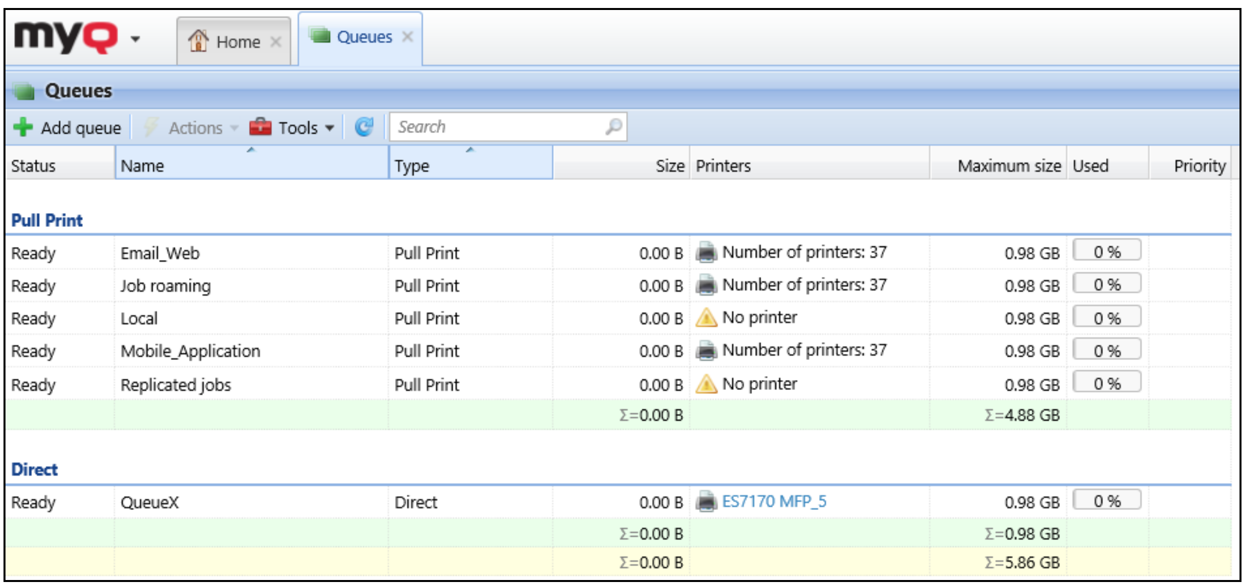
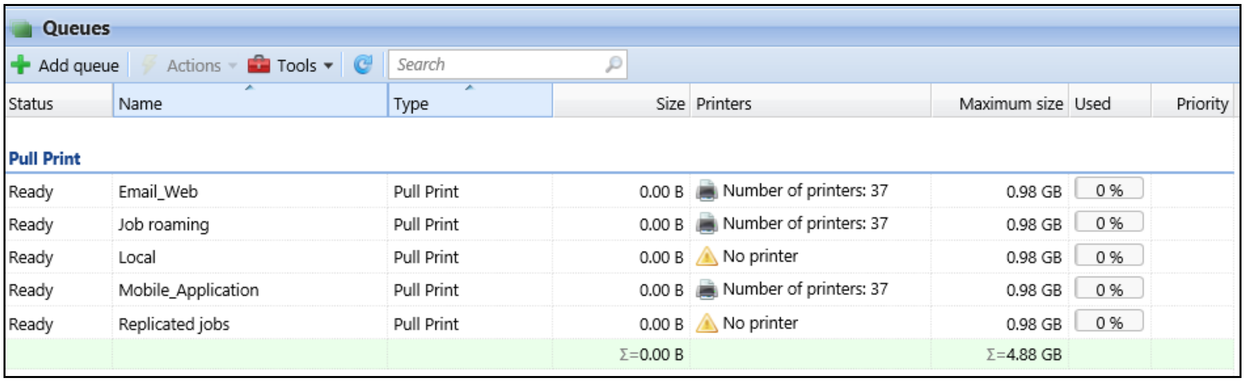


FIGURE 9.1. The **Queues** main tab

11.1. List of queues

On the **Queues** main tab, you can see queues and information about them. The queues are divided into groups according to their type: Pull Print, Direct, Tandem and Delegated printing.


Queues

Add queue | Actions | Tools | Search

Status	Name	Type	Size	Printers	Maximum size	Used	Priority
Pull Print							
Ready	Email_Web	Pull Print	0.00 B	Number of printers: 37	0.98 GB	0 %	
Ready	Job roaming	Pull Print	0.00 B	Number of printers: 37	0.98 GB	0 %	
Ready	Local	Pull Print	0.00 B	No printer	0.98 GB	0 %	
Ready	Mobile_Application	Pull Print	0.00 B	Number of printers: 37	0.98 GB	0 %	
Ready	Replicated jobs	Pull Print	0.00 B	No printer	0.98 GB	0 %	
			Σ=0.00 B		Σ=4.88 GB		

FIGURE 9.2. The list of Queues on the Queues main tab

Default queues

After installing MyQ, there are five default Pull Print queues on the **Queues** main tab: **Email_Web**, **Job roaming**, **Local**, **Mobile_Application**, **Replicated jobs**.

Email_Web queue

All jobs sent from email or directly from the web user interface are assigned to this queue. For more information about these jobs, see *"Printing from email and from the MyQ Web User Interface"* on page 222.

Job Roaming queue

Job Roaming enables users to transfer their jobs from one location to another: jobs sent to one branch can be printed on printing devices at any other branch. For more information see the *MyQ Central and Site Architecture Guide.*

Local queue

Used with locally connected printing devices (USB, LPT)

Mobile_Application queue

All jobs sent from the MyQ mobile application are assigned to this queue. For more information about these jobs, see "MyQ Mobile Printing Application User Guide".

11.2. Adding queues

To add a new queue, follow these steps:

1. On the **Queues** main tab, click **+Add queue**. The new queue properties panel opens on the right side of screen.

2. On the panel, add a **Name** for the queue, select a, **Type**, further modify the queue's settings (see *"Queues general settings"* on the next page), and click **Save**.

11.3. Deleting queues

To delete selected queues, follow these steps:

1. On the list of queues on the **Queues** main tab, select the queues that you want to delete, and then click **Actions** (or right-click the queue). The **Actions** drop-down box appears.

2. In the **Actions** drop-down box, click **Delete**. The queues disappear from the list.

11.4. Editing queues

Each individual queue has its own properties panel. To open the panel, double-click the queue on the list of queues on the **Queues** main tab (or right-click the queue, and then click **Edit**). The properties panel opens on the right side of screen.

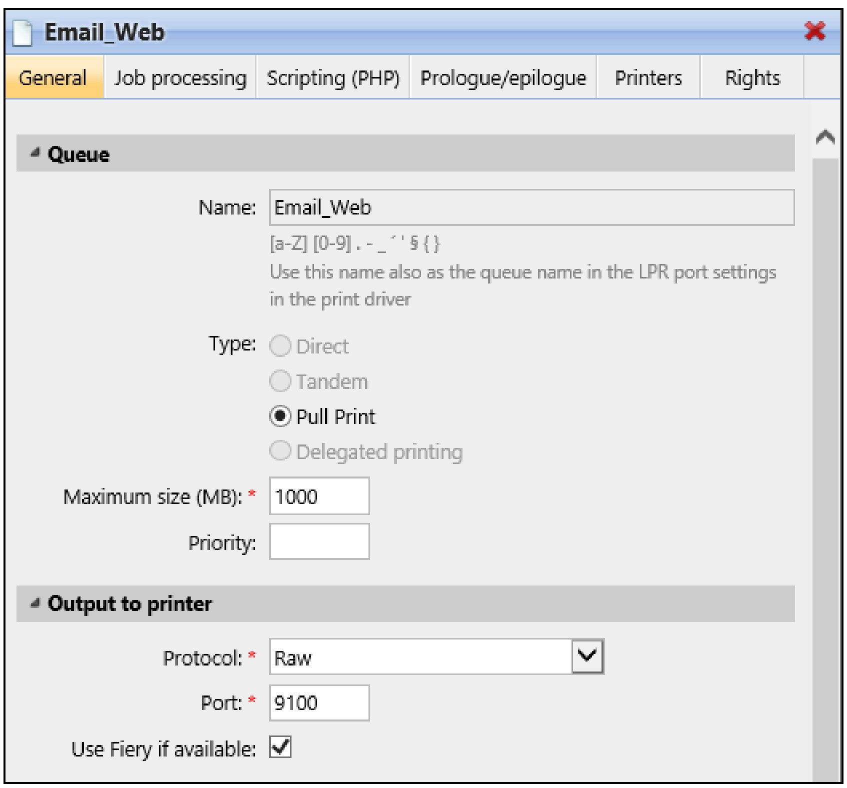
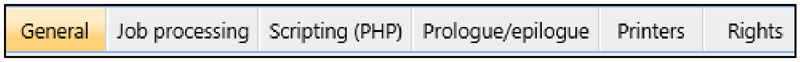


FIGURE 9.3. Individual queue properties panel

The basic setup of the queue can be done in three of the tabs: the **General** tab, the **Printers** tab and the **Rights** tab.

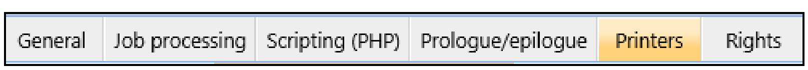
11.4.1. Queues general settings



Queue	
Name	Enter a name for the Queue. This is an essential parameter for directing print jobs to MyQ and it is part of the print port setting, it is unique, case sensitive and cannot contain diacritics and spaces. This entry is mandatory.
Type	Select a type for the queue. For more information about queue types, see *"Types of queues"* on page 179.
Jobs	
User detection method	Here you can set the user detection method. For more information, see *"User detection method"* on page 182.
Get job name from PJL	This gives you the option to discard a job when it comes without metadata.

11.4.2. Adding printing devices or groups of printing devices to queues

INFO: By default, the "All printers" group is automatically assigned to every queue. You can delete this group to restrict the number of assigned printers.



To add a printing device or a group of printing devices to the queue:

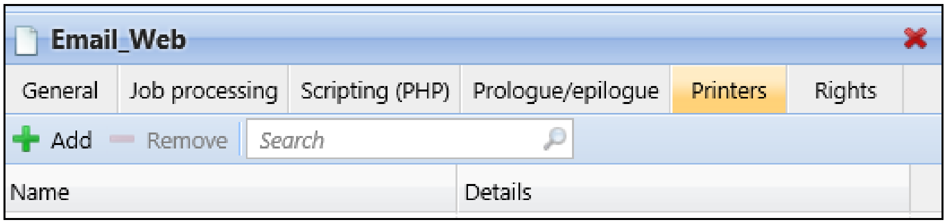


FIGURE 9.4. Adding new printing devices or groups of printing devices to the **Email_Web** queue

1. On the bar at the top of the **Printers** tab, click **+Add**. A search dialog box appears.
2. In the dialog box, find the printing device (or group of printing devices) that you want to add to the queue, and then click **OK**.

To remove a printing device or a group of printing devices from the queue:

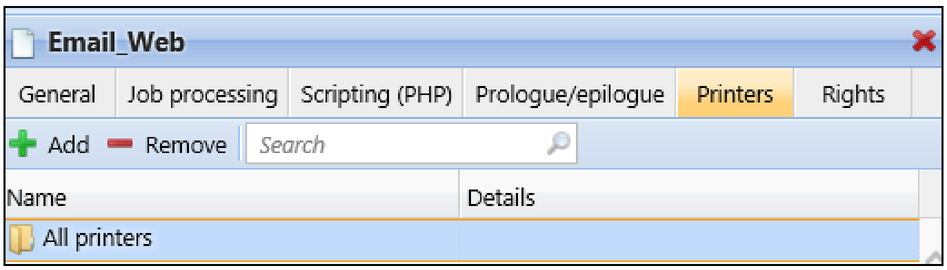


FIGURE 9.5. Removing printing devices or groups of printing devices from the **Email_Web** queue

- On the bar at the top of the **Printers** tab, select the printing device (or group of printing devices), and then click **—Remove**. The printing device (or group of printing devices) disappears from the **Printers** tab.

11.4.3. Providing users and groups of users with rights to queues

INFO: By default, the group of all users is automatically assigned to every queue. You can delete this group to restrict the number of users with the right to use the queue.

To provide a user or a group of users with rights to the queue:

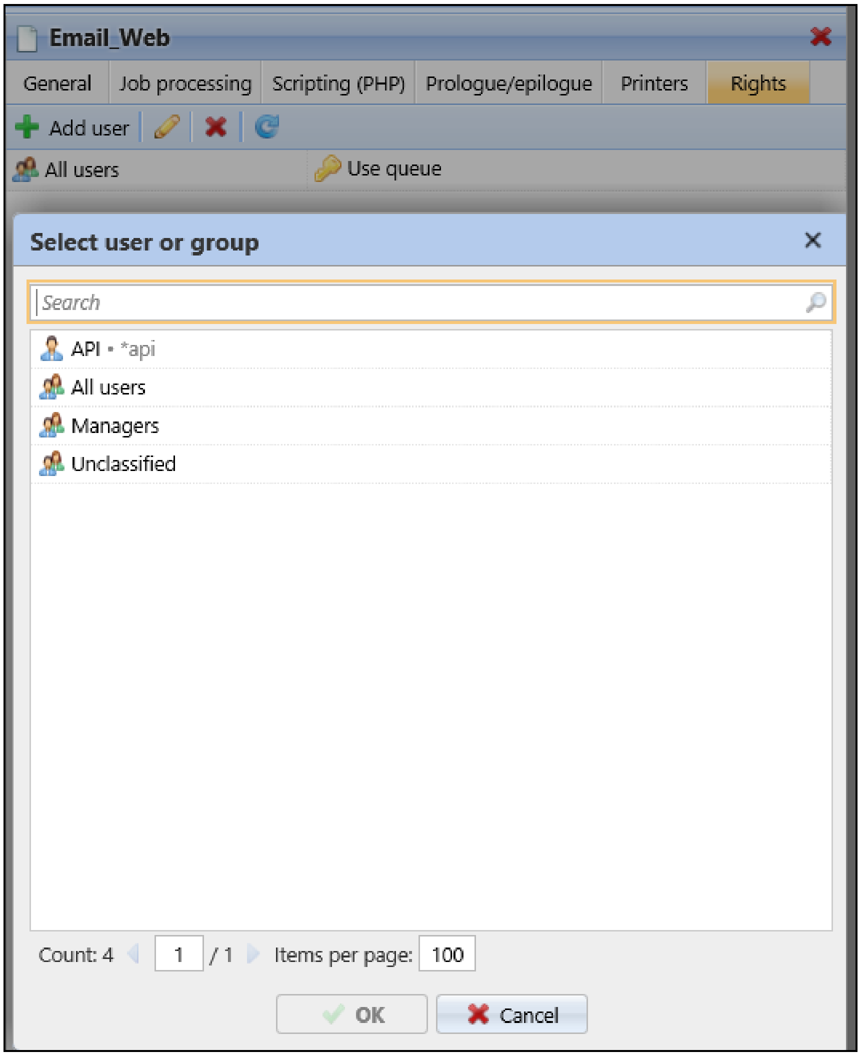


FIGURE 9.6. Providing users or groups of users with rights to the **Email_Web** queue

1. On the bar at the top of the **Rights** tab, click **+Add User**. The **Select user or group** dialog box appears.

2. In the **Select user or group** dialog box, select the user (or group of users) that you want to provide with rights to the queue, and then click **OK**.

To take away rights to the queue from a user or a group of users:

- On the **Rights** tab, select the user (or group of users), and then click the remove button
( ). The user (or group of users) disappears from the **Rights** tab.

11.5. Online/offline queues

While the default queues are always online, each of the manually added queues can be switched to the offline mode. Queues switched to the offline mode do not receive any print jobs. However, users can still print jobs that are already waiting in these queues.

Jobs sent to an offline queue are rejected with the log message: **"Unknown or inactive queue '...'. The job was discarded."** displayed in the log on the **Log** main tab of the MyQ Web Interface.

To switch between the online and the offline mode of a queue:

1. Select the queue on the list of queues on the **Queues** main tab, and then click **Actions** (or right-click the queue). The **Actions** drop-down box appears.

2. In the **Actions** drop-down box, click **Offline** (or **Online**). The queue switches to the offline or (online mode).

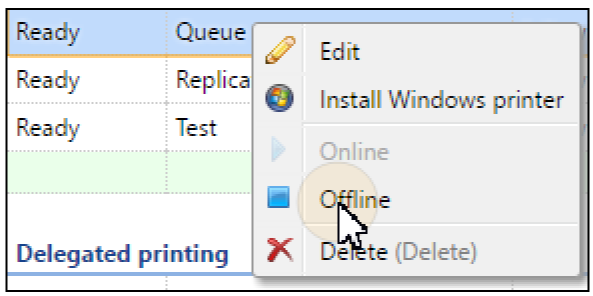


FIGURE 9.7. Switching a queue to the offline mode

11.6. Types of queues

For each queue, except for the default queues, you can select from four options as to what happens with the jobs that are sent there. This section describes these four types of queues.

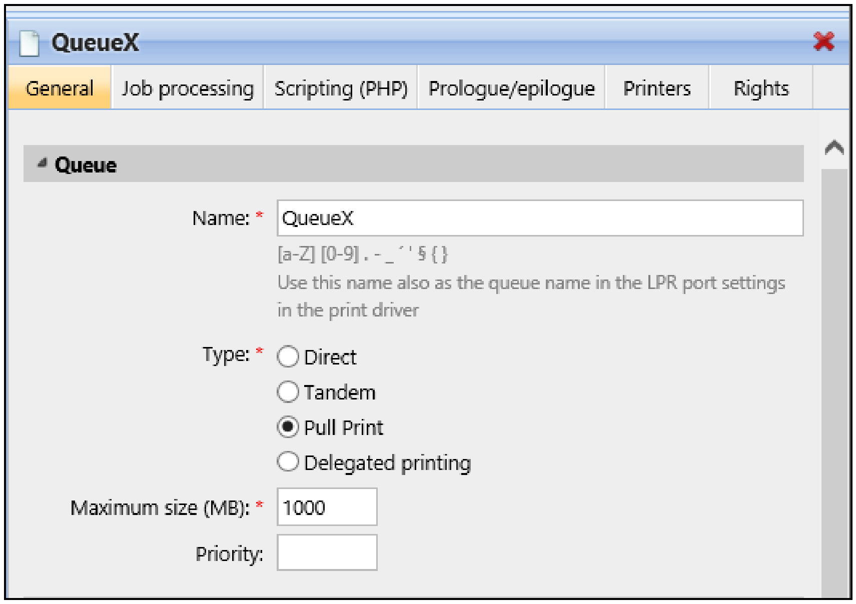


FIGURE 9.8. Selecting queue type

11.6.1. Direct queue type

A direct queue can have only one printing device assigned to it. Print jobs in this queue are sent directly to the printing device and are immediately printed.

INFO: When you add printers using printer discovery, you can automatically create a direct queue for every newly discovered device. For more information about printer discovery, see *"Printer discovery actions"* on page 81.

11.6.2. Tandem queue type

A tandem queue can be used on places with multiple printers and a higher printing volume. Jobs sent to this queue are evenly distributed among the devices and do not have to wait for one particular printer. This way, a large volume of print jobs can be spread between printers and printed in a significantly shorter time.

The queue can have multiple printing devices assigned to it. Print jobs from the queue are distributed among the printing devices that are not busy at the moment and they are immediately printed. If there are multiple idle printing devices, the print job is sent to the printer with the lowest printed pages counter.

To maintain a balanced printing device load, make sure that the printed page counters on all of the used printing devices are similar. Otherwise the printing devices with the lower printed page counter might be overused.

You can manually change the page counter on the **Printer total counter adjust for load balancing:** setting on the printing device properties panel on the **Printers** main tab. The number that you enter is added to the counter. (See *"Editing printing devices"* on page 88.)

11.6.3. Pull Print queue type

With this queue, users can send multiple jobs and print them when they want on any of the printers assigned to the queue.

The queue can have multiple printing devices assigned to it. All of the assigned printers have to be equipped with MyQ terminals. Jobs sent to a pull print queue are processed by the system and saved on the server. Once the user logs in on any printer assigned to this queue, the print job is sent to this device and the user can print it.

11.6.4. Delegated printing queue type

The delegated printing feature enables users and groups of users to choose delegates who can print their print jobs. After the delegating user (or group of users) sends a job to the **Delegated printing** queue, all delegates can see the jobs and print them. For further information about the Delegated printing feature, see *"Delegated printing"* on page 221.

The **Delegated printing** queue type works in the same way as the **Pull Print** queue type except that it supports the delegate printing feature.

INFO: The delegates do not need to have rights to the delegated printing queue where the job was sent.

INFO: For information about how to assign delegates, see *"Selecting delegates for the user"* on page 123 and *"To select delegates for the group, do the following:"* on page 128.

11.7. User detection method

One of the essential functions of MyQ is to identify the owner of a sent print job. You can select from a number of identification options. The most common way is to identify the user as the OS account from which the job was sent. If there are many users who send their jobs from one account, you can use one of the three authentication options: prompt for a PIN/card, prompt for a username and password or prompt the user to select from a list.

Apart from the above-mentioned options, MyQ offers several advanced identification options that can be used in special cases, such as if you want to use a DNS server to identify the user's computer or detect the user from the job name.

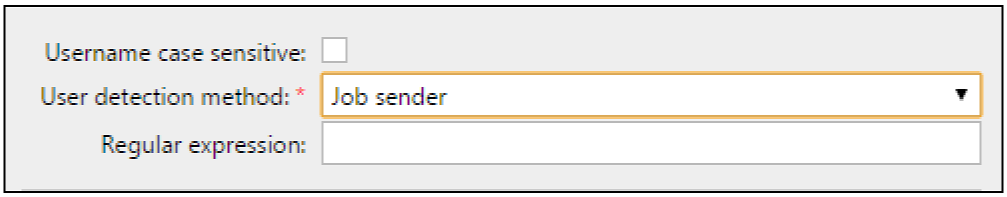


FIGURE 9.9. The user detection method setting on the queue properties panel

11.7.1. Job sender

The basic and most common option is to identify the owner as the OS user account from which the job was sent. If the user logs on the account **Eliot.Kate** and sends the job from there, MyQ identifies them as **Eliot.Kate**.

11.7.2. Smart Job Manager

This option is available on computers with either Windows or macOS. It requires the Smart Job Manager application running on the computer from which the print job is sent.

When a user sends a job to this queue, the job is automatically paused on the MyQ server and remains in the **Paused** status with the **unauthenticated user* as the job owner, until the user authenticates themselves via the MyQ Smart Job Manager application. Depending on the setting of the application's Authentication method, the user is prompted to either enter their PIN, swipe their card at a card reader, enter their user name and password, or select themselves on the list of all MyQ users. After the user is authenticated, the job's status on the MyQ server is changed to **Ready** and the job owner changes to the correct user name and it can be printed. If the user fails to authenticate themselves in Smart Job Manager, the job is rejected.

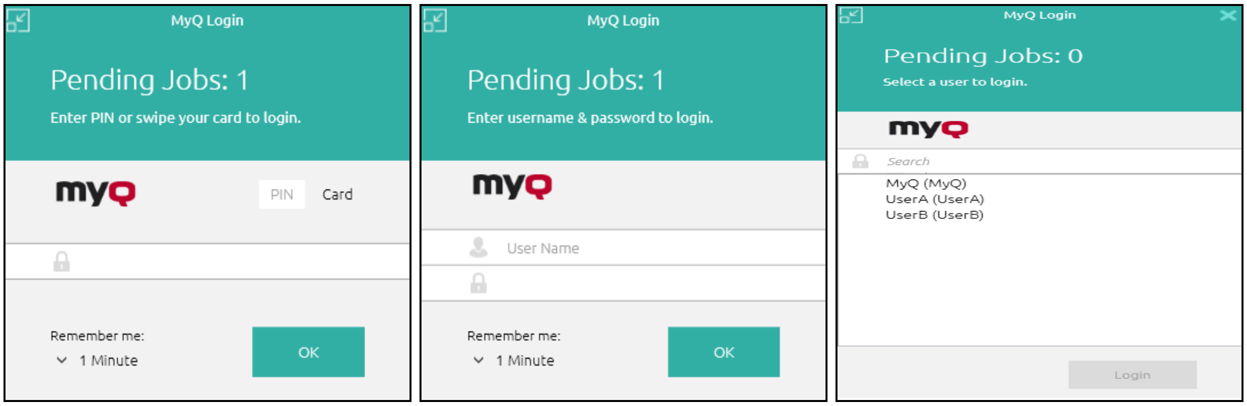


FIGURE 9.10. The SJM's login options

For information on how to install and set up the MyQ Smart Job Manager, see the Guide to MyQ Smart Job Manager for Windows or macOS.

NOTICE: In cases where there is no card reader connected to the computer where the users identify themselves from, users can type the card number instead of swiping it.

12. Advanced Queues Options

This topic introduces advanced options related to Queues in MyQ. The first section describes options and parameters available within the setup of the queue. The second section shows you how to activate and use personal queues in MyQ.

12.1. Advanced options on the General tab of the Queue

Once you have created a queue and set the common options, like the name, type, printers and rights assignments, you can select some of the more advanced job management features. This topic describes a few jobs related options available on the **General** tab of queues' properties panel.

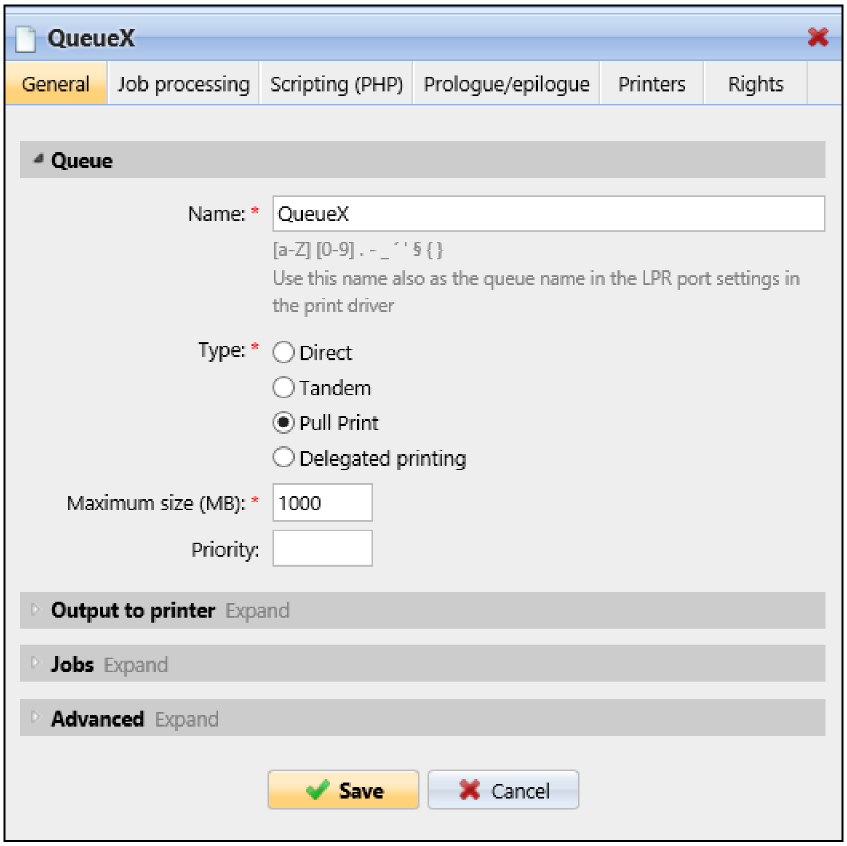


FIGURE 9.11. The **General** tab of a queue's properties panel

Maximum jobs size, Queue Priority

Maximum size (MB)

Here you set a maximum size limit (in MB) for jobs on the queue. On the **Queues** main tab, you can see the ratio of the actual size of all jobs sent to the queue to the maximum size of the queue.

Priority

When multiple jobs from pull print queues are to be released at the same time, the jobs that are sent to the queues with a higher priority are released before the jobs with lower priority.

*For example, if there are three jobs waiting to be released on a printing device, one with a priority number **0**, one with a priority number **-1** and one with a priority number **2**, the job with the priority number **2** is printed first, the job with the priority number **0** is printed second and the job with the priority number **-1** is printed third.*

Output to printer

Protocol + Port

By default, print jobs are sent from MyQ to printing devices via the **RAW** protocol. Instead of it, you can use one of the alternative standard protocol options (**IPP**, **IPPS** or **LPR**) or the **MyQ printing protocol**, which can be used in two versions:

- **MPP**: jobs sent via this protocol are compressed
- **MPPS**: jobs sent via this protocol are compressed and encrypted via SSL

On the **Port** setting, you can change the port of the selected protocol.

Use Fiery if available

If you use a Fiery module for processing Postscript jobs, make sure that this option is selected and set the IP address of the module on the properties panel of the printing device to which the module is connected. Otherwise, you can deselect the option.

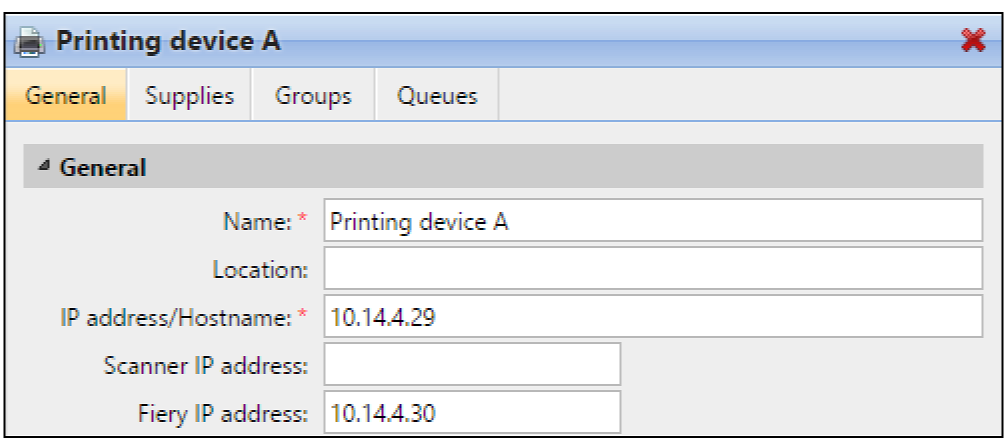


FIGURE 9.12. The Fiery IP address settings on the **Printers** main tab

Jobs

Default printer language

Choose the default printer language from the drop-down menu. The available options are:

- Unknown
- Autodetect (default setting)
- PCL 5
- PostScript
- ESC/P
- Prescribe
- PCL 6
- PDF
- JPEG
- XPS

If there is no PJL in the job specifying the print language, the default language is assumed.

Discard the job if no metadata

If this option is selected, MyQ discards all jobs that do not contain metadata from the Job Parser. It can be used together with the Credit or Quota features to prevent printing of jobs without necessary information (number of pages, color etc.).When a job is discarded due to this setting, the following message appears in the MyQ Log: "**Job metadata is required for the queue but the job parser is turned off. Job is canceled. | queue=QueueX**".

> **NOTICE:** If you select this option, make sure that the **Job Parser** is enabled. In new installations the **Job Parser** is activated by default.

INFO: On the **Jobs** settings tab, you can enable automatic notifications about refused jobs via email for both the administrator and the job sending users. For more information, see Notifying administrator and users about refused job".

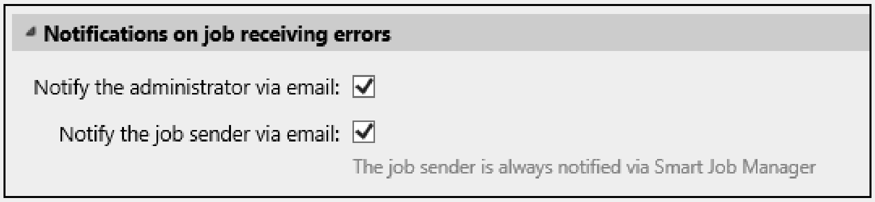


FIGURE 9.13. Notifications on job receiving errors

User detection method

One of MyQ's essential functions is to identify the owner of a sent print job. In fact, MyQ rejects and discards all jobs where the owner cannot be detected.

The available user detection methods are:

- Job sender
- Sender's computer name
- Print server's DNS name
- Sender's computer DNS name
- Detect user from the job name
- Smart Job Manager
- User detection from PJL

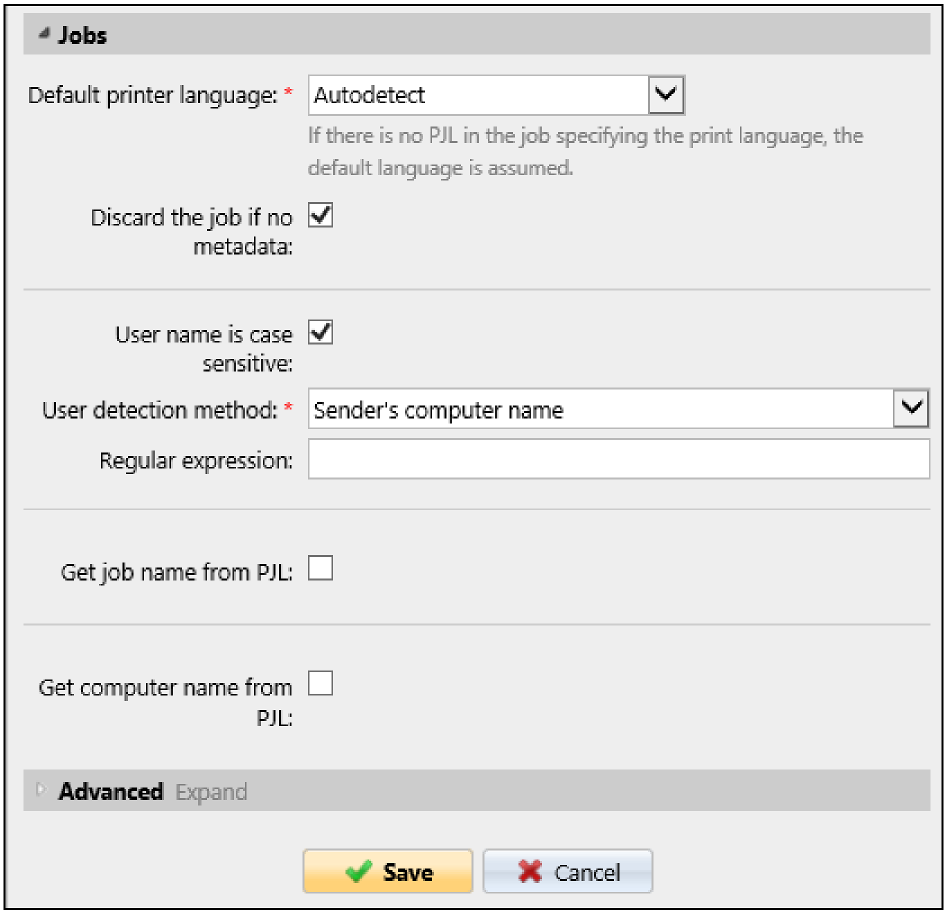


FIGURE 9.14. The **User detection method** setting on the properties panel of a queue

The most commonly used methods are *Job sender*, where the person who sent the job is identified as the job owner, and using *Smart Job Manager*.

The rest of the options are described in the following sections:

- Identifying the owner using the sender's computer name
- Using a DNS server to resolve the job owner
- Detecting the job owner from the job name
- Detecting the job owner from PJL

The last section shows how to enable case sensitivity for the job owner detection in MyQ:

- Enabling case sensitivity for the job owner detection in MyQ

Identifying the job owner with the computer name

With the **Sender's computer name** option selected, the job owner is identified as the name of the computer where the job is sent from. This way, it does not matter on which OS account the sending user is logged in and all jobs are accounted on the computer.

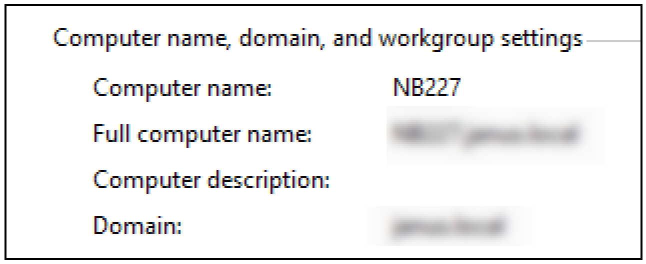


FIGURE 9.15. The computer name is displayed in the Windows system settings.

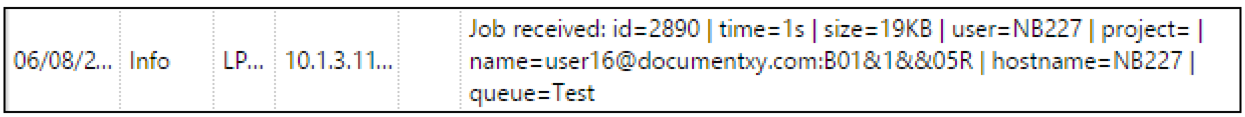


FIGURE 9.16. Log message about the received jobs shows user **NB227**, which is the sender's computer name

INFO: By default, the **Computer detection method** is set to **Default mode**. This is the standard setting that works in almost all cases. For information about alternative options, please contact your MyQ support.

INFO: A regular expression can be used to capture a part of the detected string. See *"Using Regular expressions"* on page 193.

Using a DNS server to resolve the job owner

With the two options: **Print server's DNS name** and **Sender's computer DNS name**, a DNS server is used to resolve the job owner as one of the two respective values:

1) **Print server's DNS name**: The computer or server where the print driver is installed. If the DNS server succeeds in resolving the server IP address, the job owner is identified with the server name; otherwise the job owner is identified with the IP address.

05/31/2...	Info	LPR ...	10.1.3....		Job received: id=2770 | time=1s | size=88KB | user=WIN-GOMOSMT0AO9.[illegible].local | project= | name=user16 | hostname=10.1.3.110 | queue=Test

FIGURE 9.17. Log message about the received jobs shows user **WIN-GOMOSMT0AO9.xxxx.local**, which is the print server's DNS name

2) **Sender's computer DNS name**: The computer where the job is sent from. If the DNS server succeeds in resolving the computer IP address, the job owner is identified with the computer name; otherwise the job owner is identified with the IP address.

05/31/2...	Info	LPR ...	10.1.3....		Job received: id=2772 | time=1s | size=88KB | user=10.1.3.110 | project= | name=user16 | hostname=10.1.3.110 | queue=Test

FIGURE 9.18. Log message about the received jobs shows user 10.1.3.110, which is the IP address of the sender's computer

The actual value depends on the location where the print driver is installed. For example:

If the print driver is installed on the print server **Server 1** and shared with the computer **laptop100** where the user prints from, the values are different:

- When you select the **Print server's DNS name** method, the job owner is identified with the server, e.g. Server1.domain.com,
- When you select the **Sender's computer DNS name** method, the job owner is identified with the computer, e.g. laptop100.domain.com.

If the computer does not use shared drivers but sends the jobs via its own drivers, both values are the same.

INFO: A regular expression can be used to capture a part of the detected string. See *"Using Regular expressions"* on page 193.

Detecting the job owner from the job name

With the **Detect user from the job name** option, the job owner is identified with the name of the print job. This method can be used in cases where jobs are automatically generated and sent to print by external systems, such as ERP systems. These jobs can have a specific form where the user name is part of the job name, for example **user16@documentxy.com**.

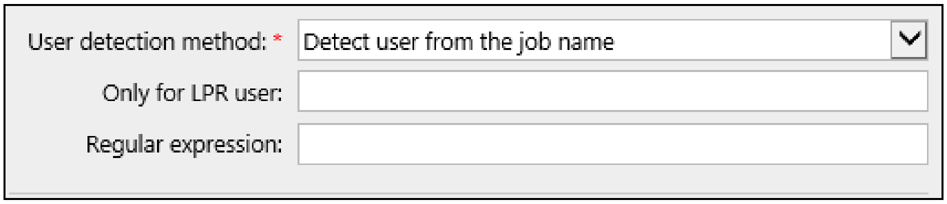


FIGURE 9.19. The **Detect user from the job name** option and related settings

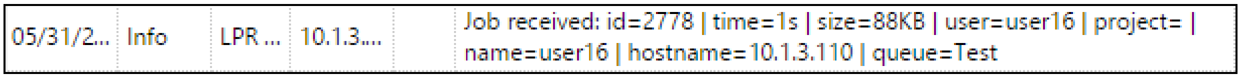


FIGURE 9.20. Log message about the received jobs shows user **user16**, which is the job name

INFO: A regular expression can be used to capture a part of the detected string. See *"Using Regular expressions"* on page 193.

Additional settings

Only for LPR user

The **Only for LPR user** setting is displayed after you select the **Detect user from the job name** option. This setting allows you to combine the **Detect user from the job name** method with the **Jobs sender** identification method. The job owner is first detected as the job sender and only if the username matches the name entered in the **Only for LPR user** text box, it is identified the job owner with the job name.

This advanced user identification may be required, for example, for some prints from the SAP system. Prints from SAP are usually not sent directly to printing devices, but first to Windows spooler (SAP LPD or SAP Print) which processes and forwards the prints to the device. This service usually runs under the system account (SYSTEM), and therefore the job sender detected from each such job is SYSTEM.

In such case, you can enter the user **SYSTEM** in the **Only for LPR user** text box. MyQ detects the sender and if it is **SYSTEM**, it identifies the job owner with the job name.

Detecting the job owner from PJL

With the **User detection from PJL** identification option, MyQ detects the job owner from one of the command lines of the print job's PJL header.

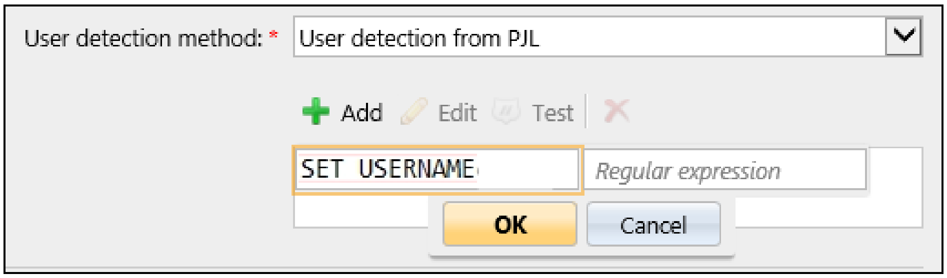


FIGURE 9.21. User detection from PJL

To select the line that is used for the definition of the job owner, click **+Add** and enter the variable (*SET USERNAME*) in the **PJL Variable** field. If you enter two or more variables separated by comma (,), MyQ tries to find a PJL line containing the first (leftmost) variable, and then eventually repeats the search for the next variable until it either finds a non-empty value with the definition of the job owner or there are no more variables to search for.

Click **Edit** to modify any existing variables, **Test** to actually test if your regular expressions work, and to delete a variable/regex set.

```
!R!SEM6;EXIT;←%-12345X@PJL JOB NAME="something 1 tom 051116 113449735"
@PJL SET TIMEOUT=300
@PJL SET RESOLUTION=600
@PJL SET BITSPERPIXEL=4
@PJL COMMENT="INFO:NUP 1; DUPLEX OFF; QTY 1; COLORMODE COLOR;"
@PJL COMMENT="APP:C:\Program Files\Windows NT\Accessories\WORDPAD.EXE;"
@PJL SET ECONOMODE=OFF
@PJL SET USERNAME="Kai"
@PJL SET JOBNAME="Something 051116 113449735"
@PJL SET QTY=1
@PJL SET KCOLORMODE=COLOR
@PJL SET KGLOSS=LOW
@PJL SET KTRAPPING=2
```

FIGURE 9.22. The PJL header can be found at the beginning of the job PRN file.

Similarly to the combination of the **Jobs sender** and the **Detect user from job name** detecting methods described in the previous section, you might need to select this option for print jobs sent to MyQ from the SYSTEM account.

INFO: A regular expression can be used to capture a part of the detected string. See *"Using Regular expressions"* below.

Enabling case sensitivity for the job owner detection in MyQ

If you have a case sensitive operational system, such as LINUX, where you can create two users whose user names differ only in cases, for example users **juliette** and **Juliette**, you should select the **User name case sensitive** option.

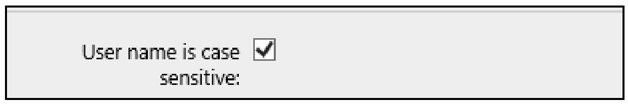


FIGURE 9.23. **User name is case sensitive** option

With this option selected, MyQ differentiates between two users that differ only in the case used. For example, if the user **Kohei** is registered in MyQ (and the user **kohei** is not) MyQ rejects jobs sent from the OS account **kohei**.

Using Regular expressions

You can use regular expressions to capture a part of the string that MyQ detects within any of the detection methods. To do this, define the expression in the **Regular expression** field of the **Jobs** section.

MyQ searches for the desired job owner name in two steps. First, it finds the leftmost match for the regular expression, and then it identifies the job owner with the leftmost group captured in the match. This way you can search for a string and define which part of it will be identified as the job owner. For example, you can use the regular expression to find an email address in the detected name string and use the group capturing to save just the part preceding the @ symbol.

Get job name from PJL

With **Get job name from PJL** enabled, MyQ takes the job name from the **@PJL JOB NAME** parameter in the PJL header instead of detecting it from the LPR protocol.

Click **+Add** to enter PJL variables and regular expressions, **Edit** to modify any existing variables, **Test** to actually test if your regular expressions work, and to delete a variable/regex set.

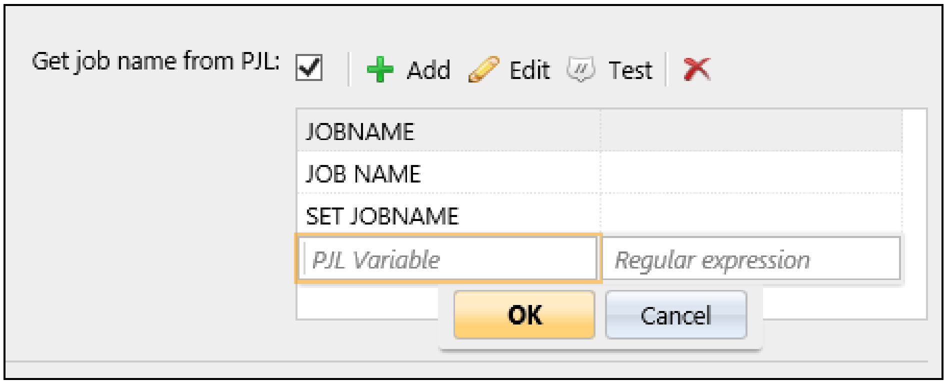


FIGURE 9.24. **Get job name from PJL** properties.

INFO: The job name in the PJL header may differ from the printed document's name.

Get computer name from PJL

With **Get computer name from PJL** enabled, MyQ takes the computer name from the PJL header instead of detecting it from the LPR protocol.

Click **+Add** to enter PJL variables and regular expressions, **Edit** to modify any existing variables, **Test** to actually test if your regular expressions work, and to delete a variable/regex set.

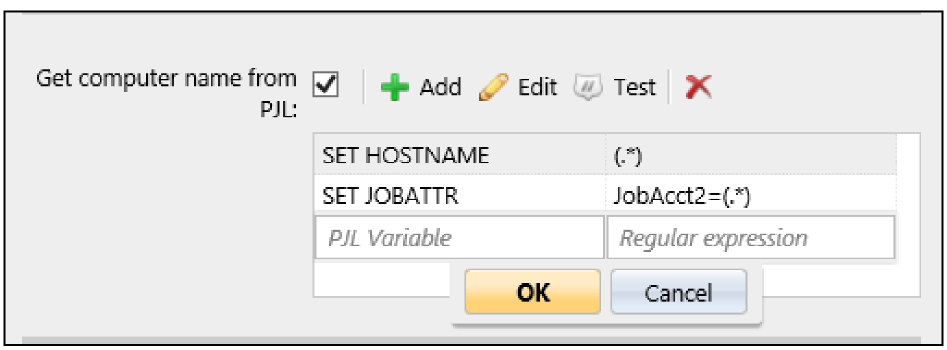


FIGURE 9.25. **Get computer name from PJL** properties.

12.2. Personal Queues

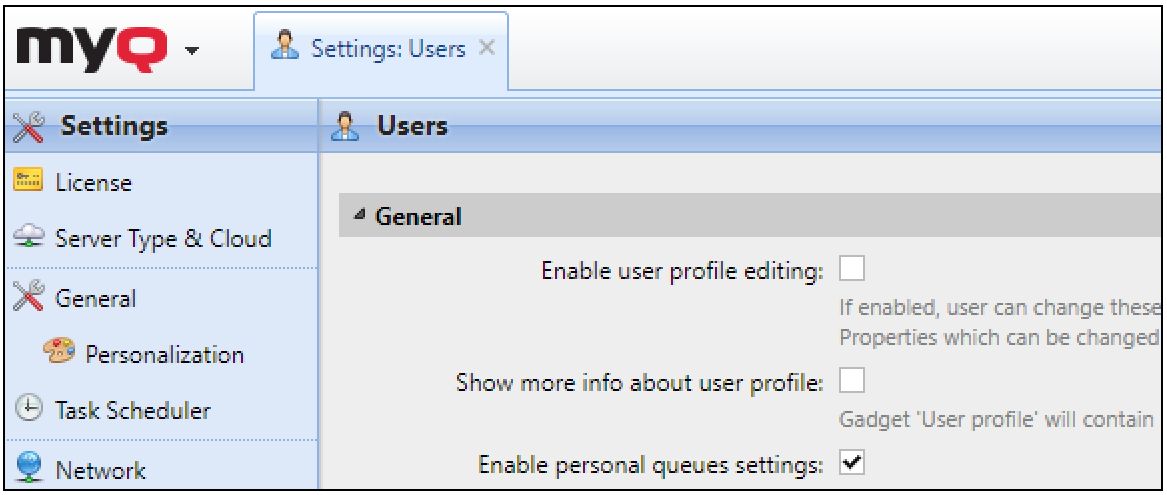
Personal queues in MyQ enable users to select the queues where their print jobs are sent. The users can create multiple queues to ascertain that at least one of them has available printing devices where the job can be released.

INFO: If a user is not allowed to send the job to the currently checked personal queue, MyQ skips it and moves to the next one. If all personal queues are skipped, the job is sent to the queue set on the print port.

12.2.1. Activating the feature

To activate the personal queues, do the following:

1. On the **Users** settings tab, select the **Enable personal queues settings** option.



2. On the properties panel of the queue where the user's jobs are sent by the print driver, add the PHP script shown below. The script moves the jobs to the first available personal queue of the user.

- ```
  // get all user's queues sorted by priority
   $personalQueues = $this->owner->personalQueues;
  // loop them
  foreach ($personalQueues as $q) {
   // skip queue if no printer is available
   if ($q->isAnyPrinterAvailable() === false) {continue;}
   // queue printer is available, move job to queue
   $this->moveToQueue($q->name);
   // job is moved, stop the loop
  break;}
  ```

After the feature is set up, each user can see a button for setup of their personal queues on their account on the MyQ Web Interface.
  ```

12.2.2. Selecting and using the personal queues

Once the feature is activated, both the MyQ users and the MyQ administrator can add and delete the personal queues.

Adding and deleting the personal queues by users

Users add and delete the personal queues on their user account on the MyQ Web Interface. To do this, they need to log in to the interface, then click **Personal queues** there, and lastly set the queues in the **Personal queues** dialog box.

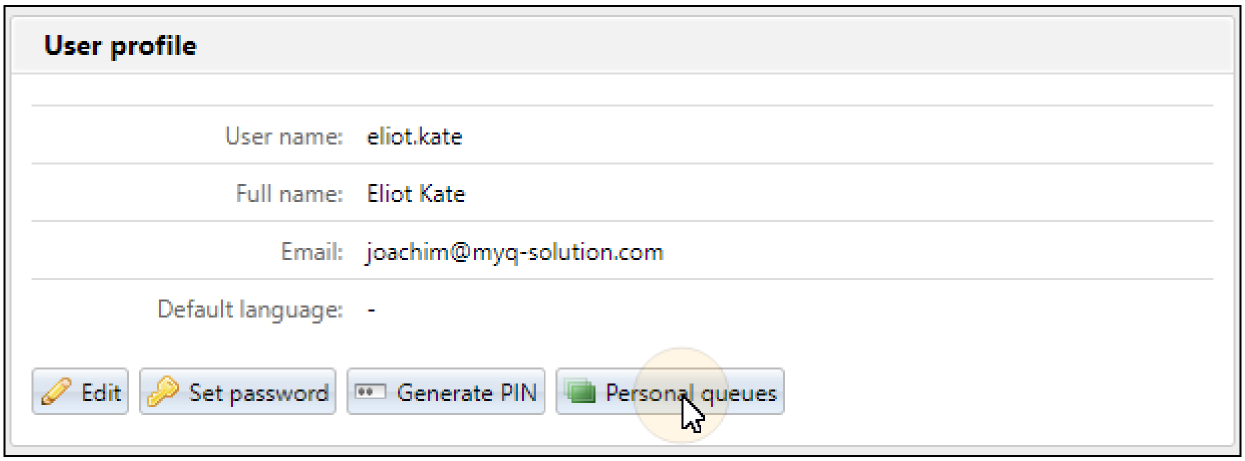


FIGURE 9.26. Opening setup of personal queues

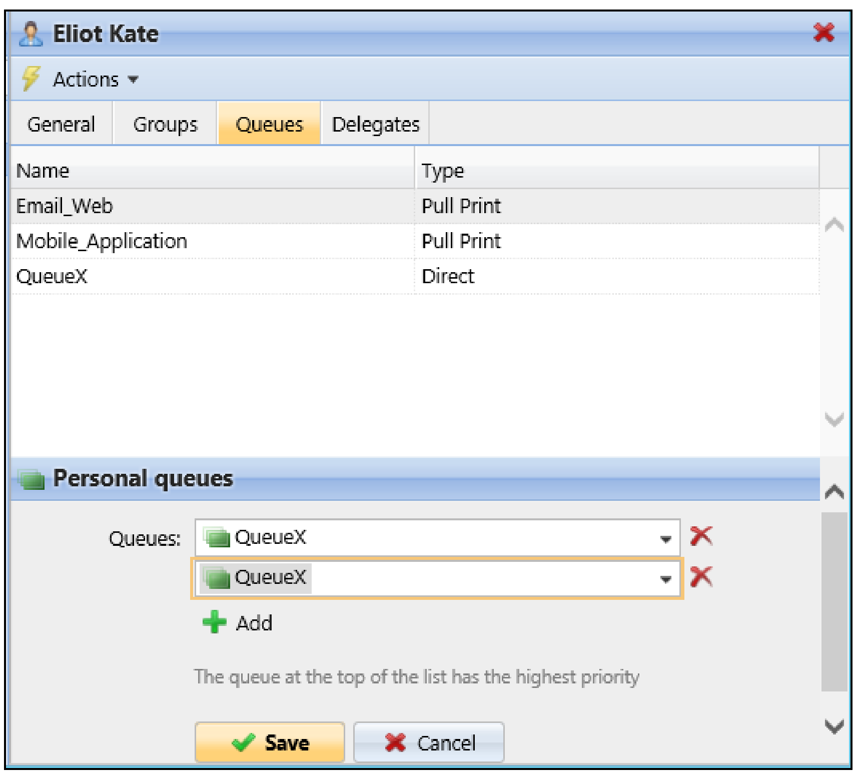


FIGURE 9.27. Setting personal queues

After the user sends the job, MyQ checks the personal queues and sends the job to the first queue with available printing devices.

Adding and deleting the personal queues by the administrator

The adminstrator adds and deletes the user's personal queues on the **Queues** tab of the user's properties panel on the **Users** main tab of the MyQ Web Interface.

To access the tab, open the **Users** main tab (**MyQ, Users**), then double-click the user (or right- click the user, and then click **Edit** on the shortcut menu) to open the properties panel, and lastly click **Queues** on the panel.

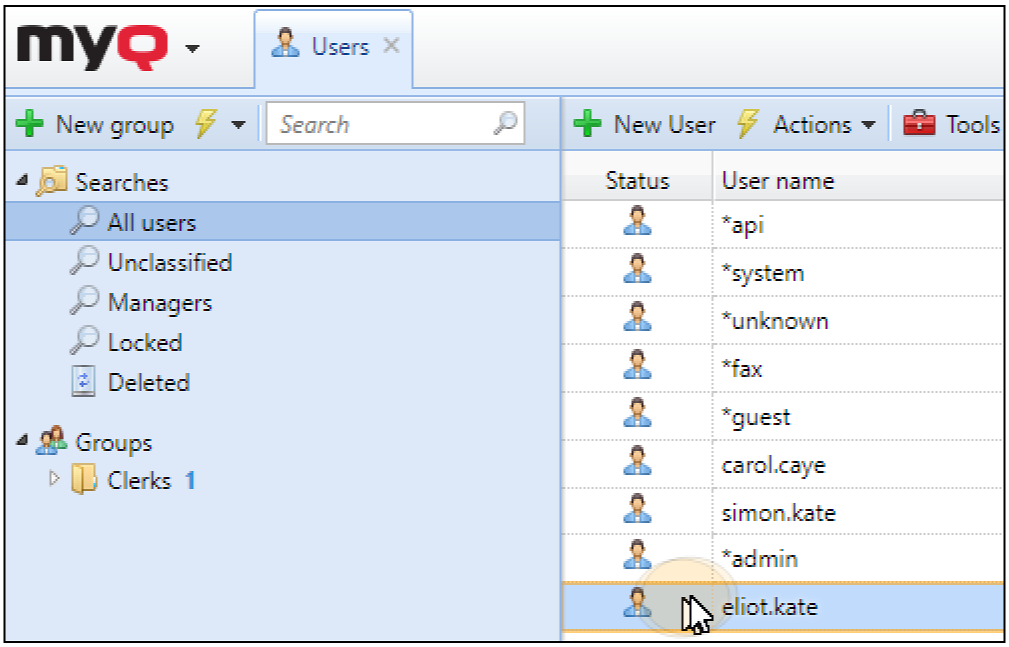


FIGURE 9.28. Opening the user's properties panel

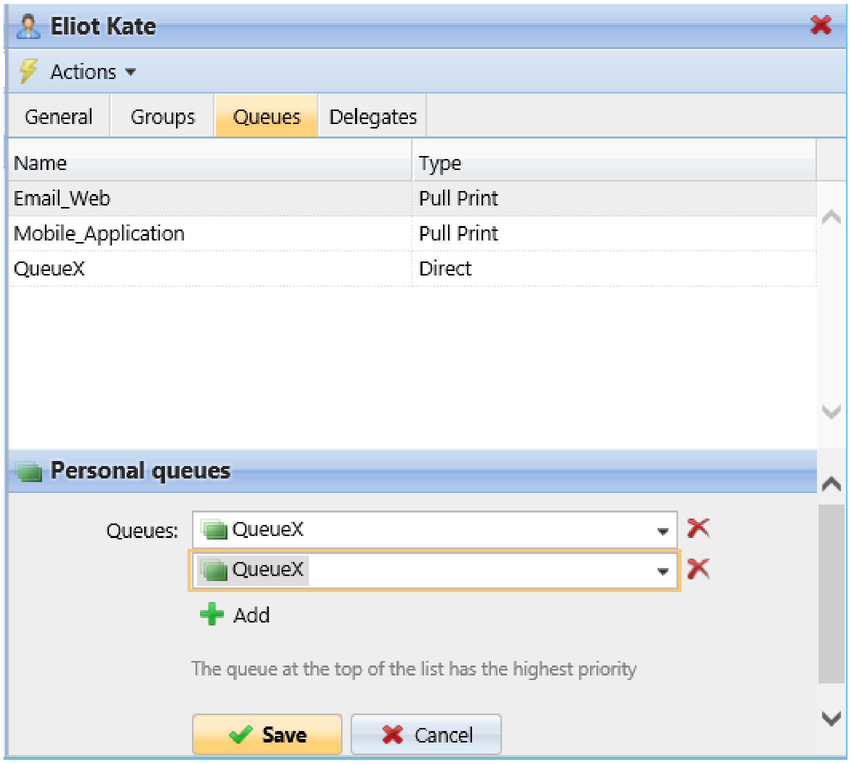


FIGURE 9.29. Personal queues on the Queues tab of the user's properties panel

13. Watermarks

On the MyQ Web Interface, you can create collections of watermarks and associate them with the queues where they will be used. Each collection can contain multiple watermarks and can be associated with any number of queues.

INFO: PostScript and PCL drivers are supported, but should be selected by the user when they want to see the watermarks printed in their document.

Jobs sent to a queue will have the watermarks of the associated collection printed on each page.

Individual watermarks can be positioned horizontally at the top of the page, horizontally at the bottom of the page, or diagonally. The text size of the watermark can be from *6-25*. You can also represent the text of the watermark as a QR code or a Bar code.

INFO: A watermarks collection cannot be deleted if there is at least one queue attached to it.

13.1. Creating, editing and deleting watermark collections

The watermarks collections are created in the **Watermark collections** section at the bottom of the **Jobs** settings tab. To open the tab, go to **MyQ, Settings, Jobs**.

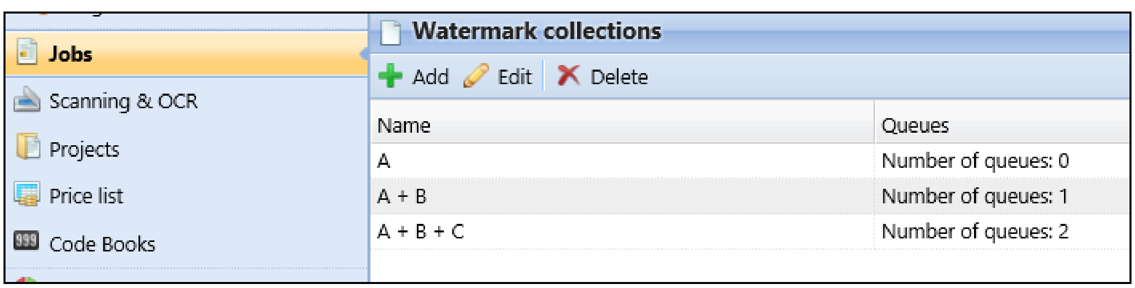


FIGURE 9.30. The setup of watermark collections on the Jobs settings tab

13.1.1. Creating a new watermark collection

To create a new watermark collection, do the following:

1. On the **Jobs** main tab, under **Watermark collections**, click **+Add**. The properties panel of the new collection opens on the right side of the screen.

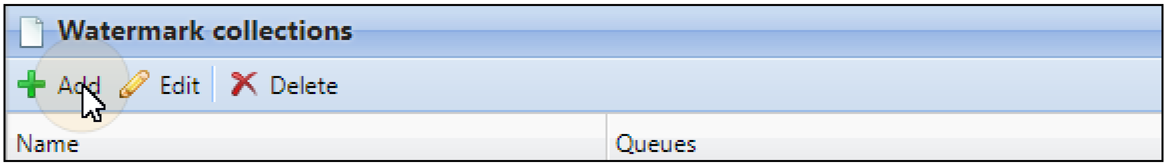


FIGURE 9.31. Adding a new watermark collection

2. On the panel, enter the name of the collection, then create the watermarks, and lastly click **Save**. For information on how to add and remove the watermarks, see *"Adding, editing and deleting watermarks within a collection"* on the facing page.

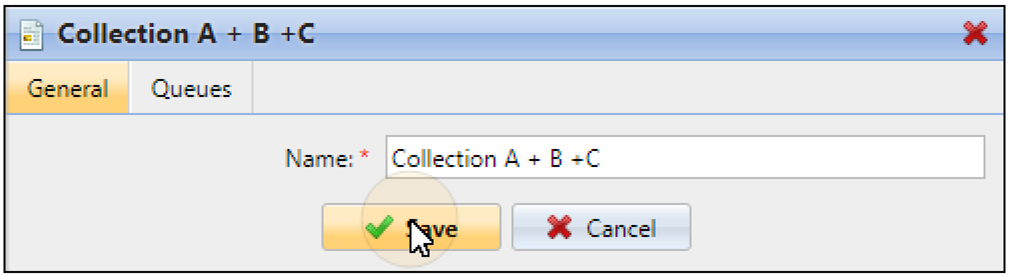


FIGURE 9.32. Editing and saving the collection

13.1.2. Editing a watermark collection

The properties panel of the collection opens immediately after the collection is created. To open a properties panel of an already existing collection, select it on the on the list on the **Jobs** main tab, under **Watermark collections** and click **Edit**.

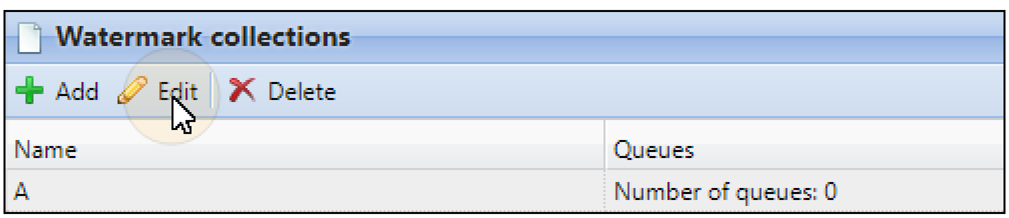


FIGURE 9.33. Opening the editing options of a watermark collection

On the properties panel, you can rename the collection, create and remove watermarks and assign or remove them from queues.

13.1.3. Deleting a watermark collection

To delete a collection, do the following:

- On the **Jobs** main tab, under **Watermark collections**, select the collections that you want to delete, and then click **Delete**.

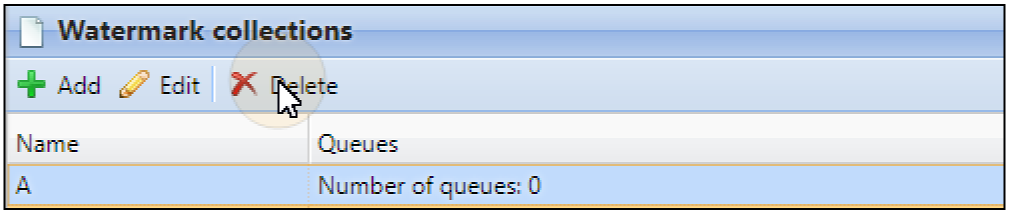


FIGURE 9.34. Deleting a watermark collection

13.2. Adding, editing and deleting watermarks within a collection

Within each collection, you can create an unlimited number of watermarks. Each of the watermarks in the collection can be activated or deactivated.

13.2.1. Creating a new watermark

To create a new watermark, do the following:

1. On the properties panel of the watermark collection, on the **General** tab, click **+Create watermark**. The properties panel of the new watermark opens.

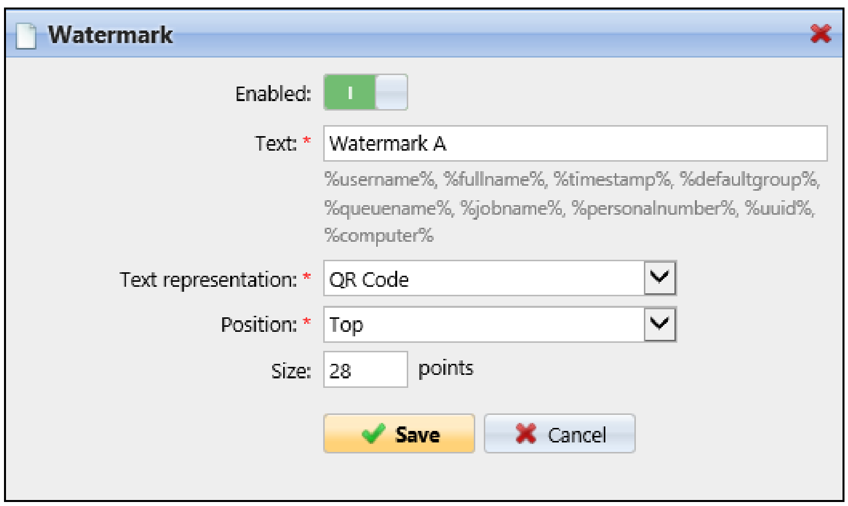


FIGURE 9.35. Creating a new watermark

2. On the panel, set up the watermark, and then click **Save**.

13.2.2. Editing a watermark

The properties panel of a watermark opens immediately after the watermark is created. To open the properties of an already existing watermark, double-click it on the list on the **Jobs** main tab, under **Watermark collections**.

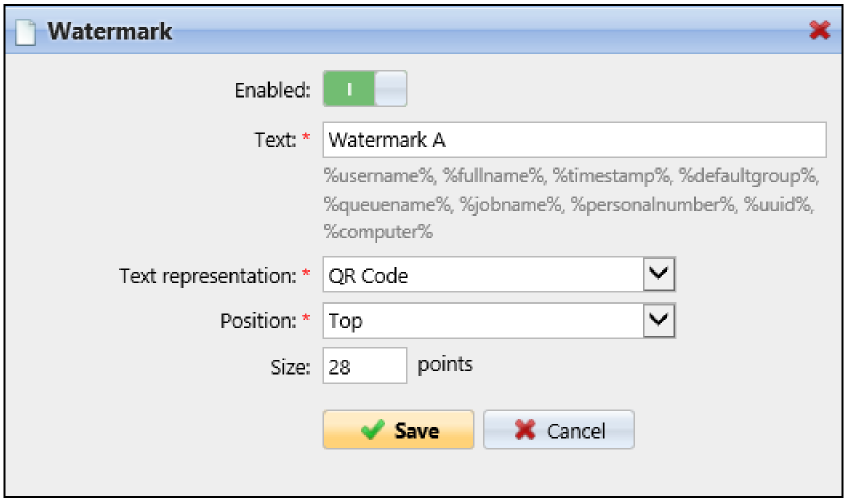


FIGURE 9.36. Editing and saving the watermark

After you set the properties, click **Save** to submit the changes.

Each watermark has the following properties:

- **Enabled**: Enable/disable the watermark
- **Text**: Text of the watermark; max. length: 512 characters.
- **Text representation**: National characters which are included in the font (standard New Times Roman) are included for Text. The QR/Bar Codes support generally any unicode text. Restrictions can be found here: QR Code , Code 128 , PDF417 , and most restrictive Code 39.
  The text can be represented in the following forms:
    - Text
    - QR Code
    - BAR Code 128
    - BAR Code 39
    - BAR Code PDF417

- **Position**: The watermark's position on the page (Default is: Bottom right)
    - Top
    - Top Left
    - Top Right
    - Bottom
    - Bottom Left
    - Bottom Right
    - Diagonal: "Bottom to Top" (only available when *Text* is selected as **Text representation**; greyed out in *QR* and/or *BAR code*)
    - Diagonal: "Top to Bottom" (only available when *Text* is selected as **Text representation**; greyed out in *QR* and/or *BAR code*).

- **Size**: The watermark's text size (Default is: *28* and Font is *Times New Roman*, which can be changed in the config.ini) should be a number from *6-85*
    - 28 is small,
    - 57 is medium,
    - 85 is large.

- **Transparency**: Only visible when *Text* is selected as **Text representation**. The available values are:
    - Dark
    - Medium
    - Light

NOTICE: A watermark in Postscript does not reflect paper orientation. It always prints as portrait.

13.2.3. Deleting a watermark

To delete a watermark, do the following:

- On the properties panel of the watermark collection, select the watermarks that you want to delete, and then click **Delete**.

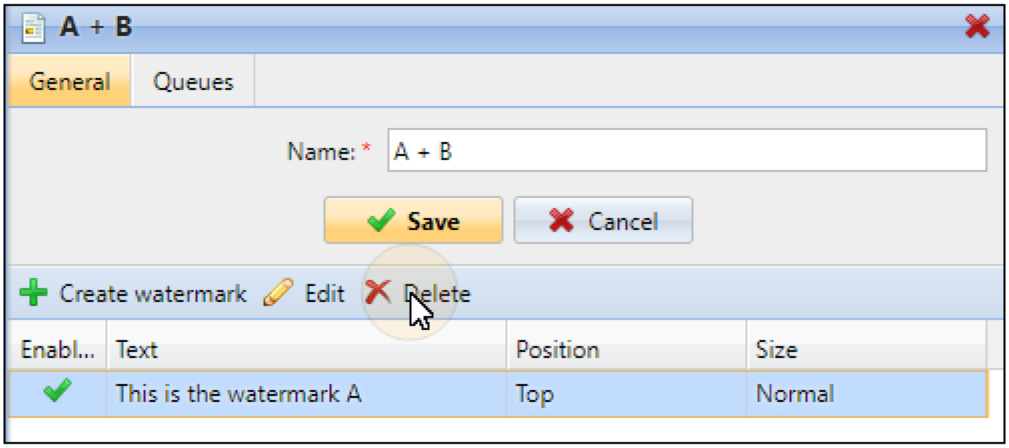


FIGURE 9.37. Deleting a watermark

13.3. Attaching watermark collections to queues

You can attach a watermark collection to a queue either within the setup of the collection, or within the setup of the queue.

Each queue can have only one watermark collection attached to it.

13.3.1. Attaching watermark collections to queues within the setup of the queues

The collection can be selected on the **Job processing** tab of the properties panel of the queue. To open the properties panel, click **MyQ**, then click **Queues** to open the **Queues** tab, and then double-click the queue on the list of queues.

To attach a watermark to a queue here, select it in the combined box on the **Job processing** tab, and then click **Save**.

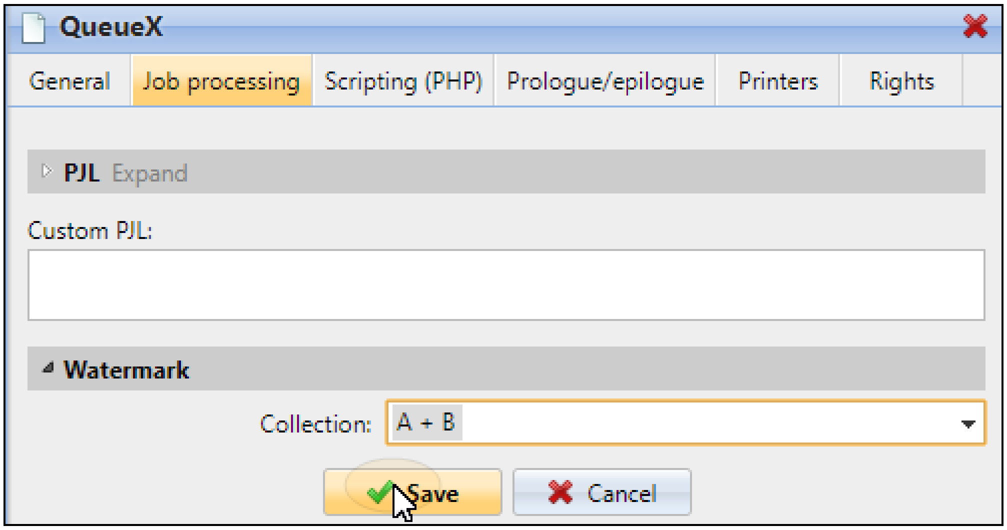


FIGURE 9.38. Selecting and saving the collection

13.3.2. Attaching watermark collections to queues within the setup of the collections

Within the setup of the watermark collection on the its properties panel, you can select the queues to which the collection will be attached.

To assign a new queue to a watermark collection here, do the following:

1. On the properties panel of the watermark collection, click **Queues**. The **Queues** tab opens.

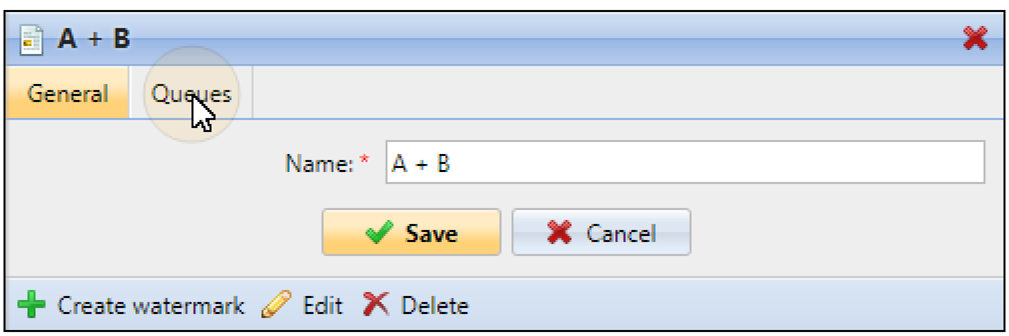


FIGURE 9.39. Opening the Queues tab on the watermark collection's properties panel

2. On the tab, click **+Add**. A dialog box with a selection of queues appears.

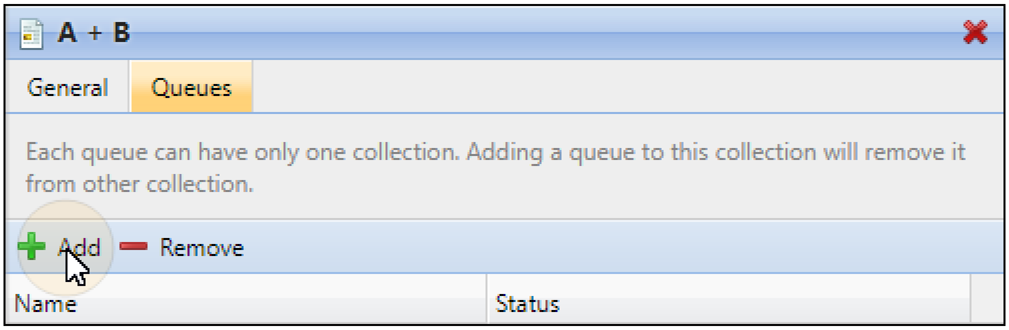


FIGURE 9.40. Adding a new queue to the watermark collection

3. In the dialog box, select the queue, and then click **OK**.

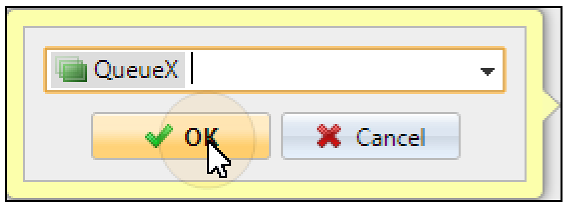


FIGURE 9.41. Selecting the queue

14. Printing to MyQ

This topic discusses the settings that need to be done outside of MyQ to enable MyQ essential functions, such as monitoring jobs and detecting users.

INFO: Although the procedure of installing and setting the print drivers is different on other operational systems, the principal remains the same. You need to add a print port, set the MyQ server's IP address or hostname and set the name of the queue where jobs are sent via this port.

Adding print ports in Microsoft Windows

1. In **Windows**, under **Devices and Printers**, select any printer, and then click **Print server properties**. The **Print server properties** dialog box appears.

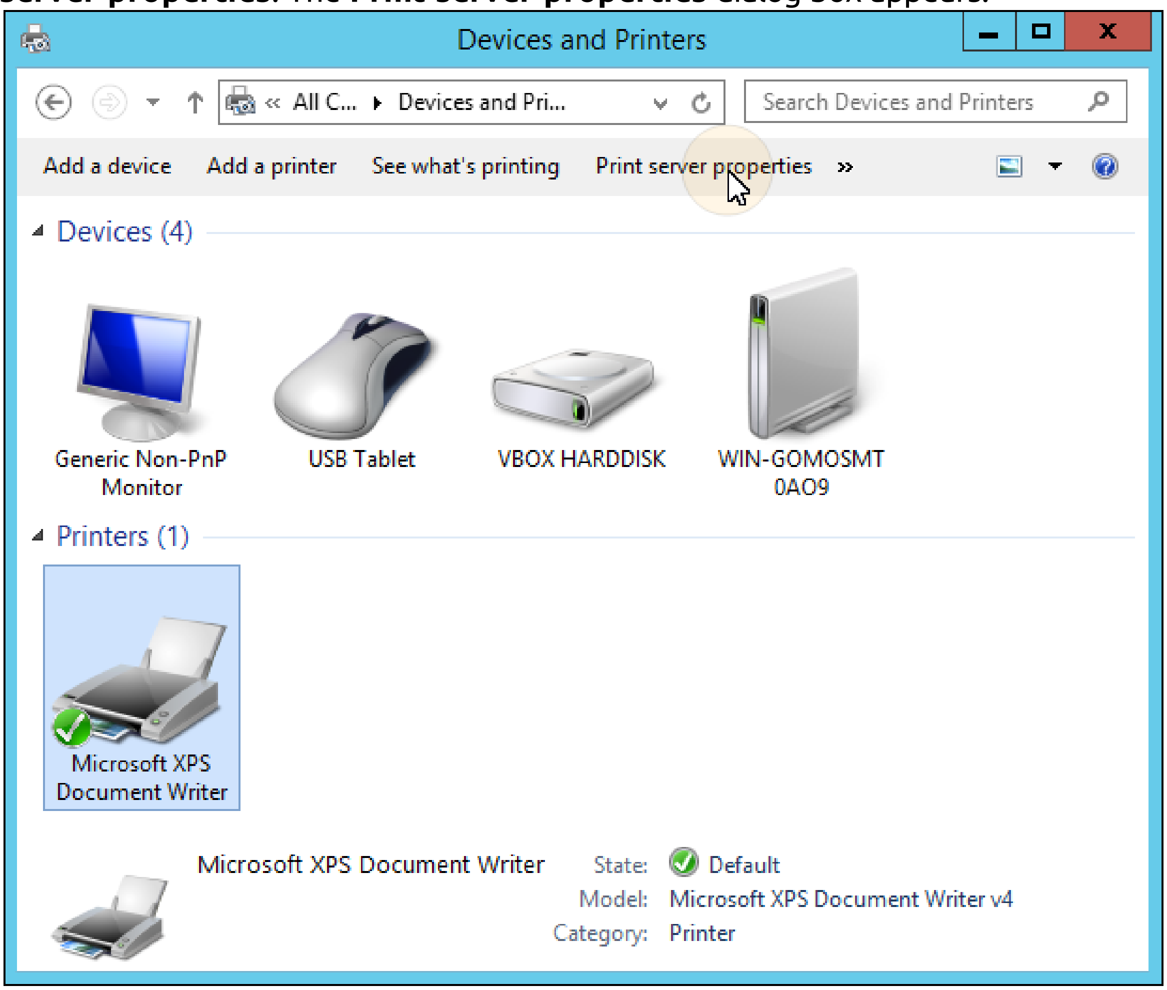


FIGURE 10.1. Opening **Print server properties** in Windows

2. In the dialog box, open the **Ports** tab, and then click **Add Port**. The **Printer Ports** dialog box appears.

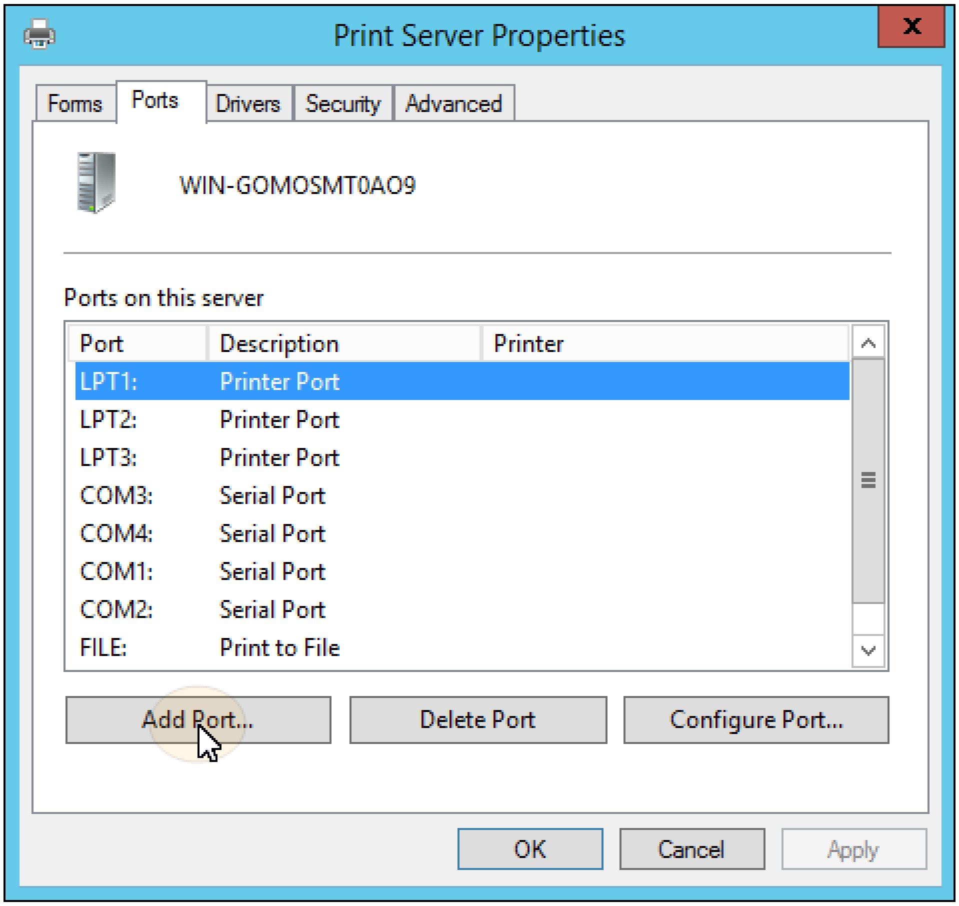


FIGURE 10.2. The **Ports** tab in the **Print Server Properties** dialog box

3. On the **Printer Ports** dialog box, select **Standard TCP/IP Port**

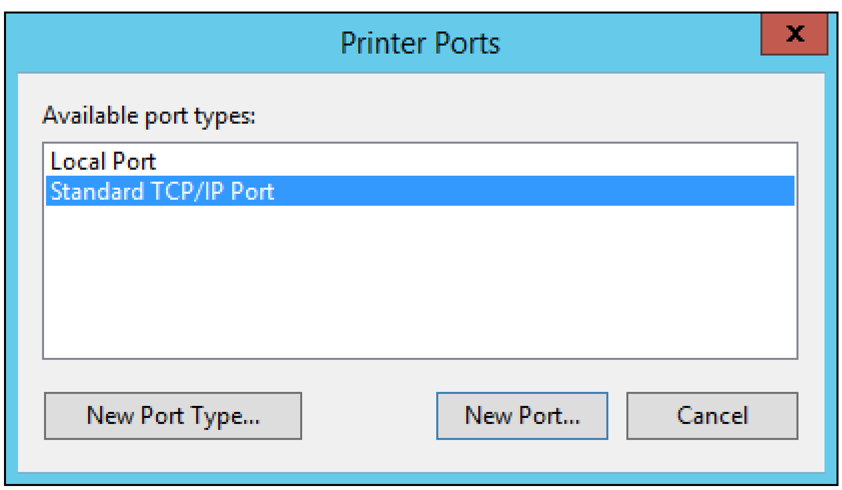


FIGURE 10.3. The **Printer Ports** dialog box

4. Click **New Port**. The **Add Standard TCP/IP Printer Port Wizard** dialog box opens.

5. Click **Next**.

6. Enter the **IP address** or **the hostname** of the MyQ **server**,

7. Optionally change the **Port Name**.

8. Click **Next**. You are asked to provide additional port information.

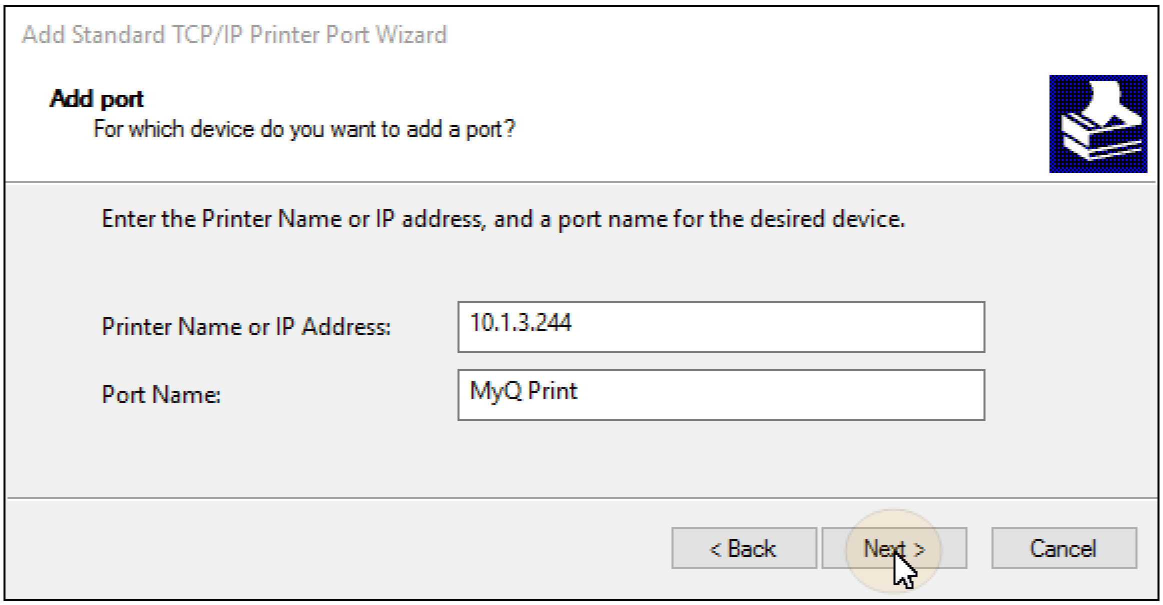


FIGURE 10.4. Entering the IP address or hostname of the MyQ server

9. Under **Device Type**, select **Custom**,

10. Click **Settings**. The **Configure Standard TCP/IP Port Monitor** dialog box appears.

11. In the dialog box,

    a. Under **Protocol**, select the **LPR** option;

    b. Under **LPR settings**, enter the name of the MyQ **queue** to which you want to print;

    c. Select the **LPR Byte Counting Enabled** option;

    d. Click **OK** after the settings are changed.

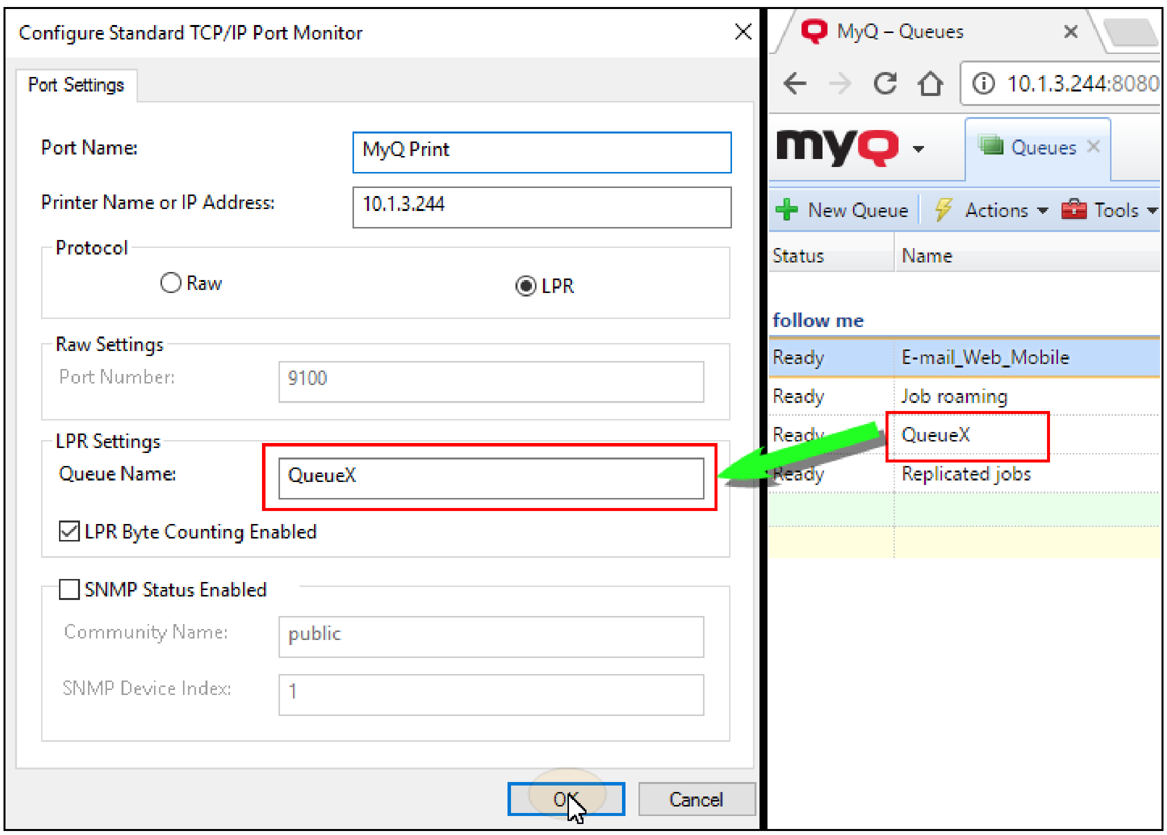


FIGURE 10.5. The **LPR option** is selected, the name of the **MyQ queue** is entered and the **LPR Byte Counting** is Enabled.

12. Back on the **Add Standard TCP/IP Printer Port Wizard** dialog box, click **Next**. You are informed about the characteristics of the new port.

13. Click **Finish**. The new port is added to the list of ports in the **Ports** section of the **Print server properties** dialog box.

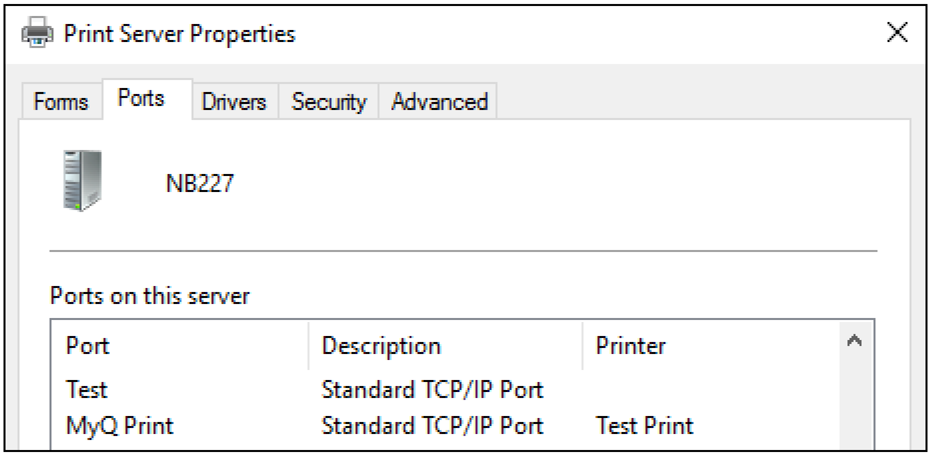


FIGURE 10.6. The new port in the **Print server properties** dialog box.

14.1. Jobs via IPPS

To use Jobs via IPPS you must enable this setting in **MyQ, Jobs, Jobs via IPPS**

The feature is available on Windows, Linux, Chromebooks and Mac PCs. For all of them you need to adjust the URL https://{hostname}:{port}/queue/{queue-name} to your own needs to get IPPS working. For the port number use the one set in **MyQ, Jobs, Jobs via IPPS**; this is *8631*.

INFO: The maximum job size received over IPPS is unlimited.

NOTICE: Kyocera PM provider uses the port 631 for IPP printing and 717 for IPPS. Both ports cannot be used for IPPS printing.

14.1.1. IPPS via Windows

When you add a new network printer make sure to search using the queue name, host name and port in the URL.

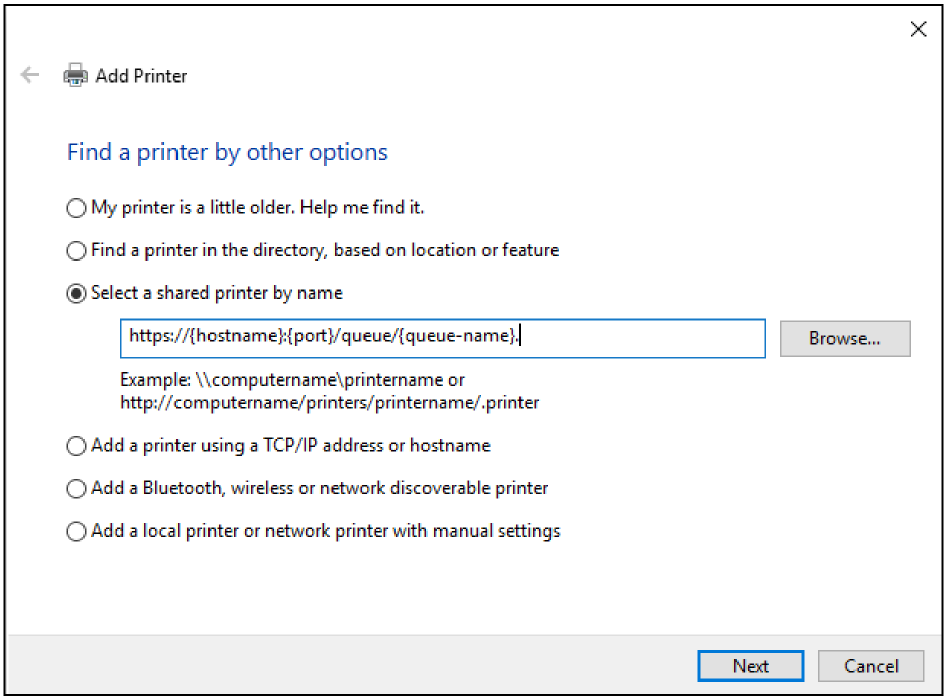


FIGURE 10.7. Adding IPPS printer in Windows

INFO: The sharing of a Windows IPPS printer is not supported.

14.1.2. IPPS via MacOS

To add IPPS printing via MacOS, do the following:

1. Go to the Add printer page.
2. Click the **IP** button on the ribbon
3. Fill out the following fields:
    i. **Address**: use htpps:// to get IPPS printing,
    ii. **Protocol**: select the IPP protocol,
    iii. **Queue**: the name of the MyQ queue.
4. Click **Add**.

14.1.3. IPPS via Chromebook

To add IPPS printing via Chromebook, do the following:

1. In the Chromebook, sign in to your Google Admin Console in https://admin.google.com/ using an administrator account.

2. In the Google Admin Console, select **Devices** and then **Chrome** and **Printers**.

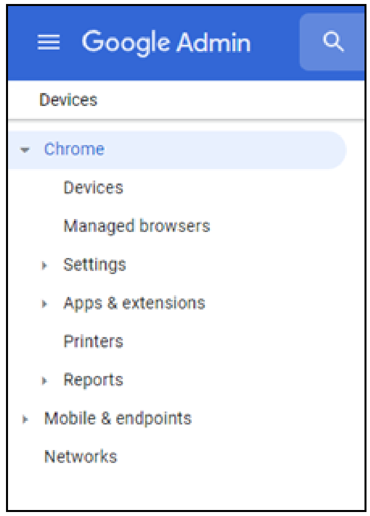


FIGURE 10.8. Google Admin Console - Device Management

3. To apply the IPPS setting to all the printers, select the top organizational unit on the list. Otherwise, select any of the child units.

4. To add new printers, click on the printer icon on the lower-right corner.

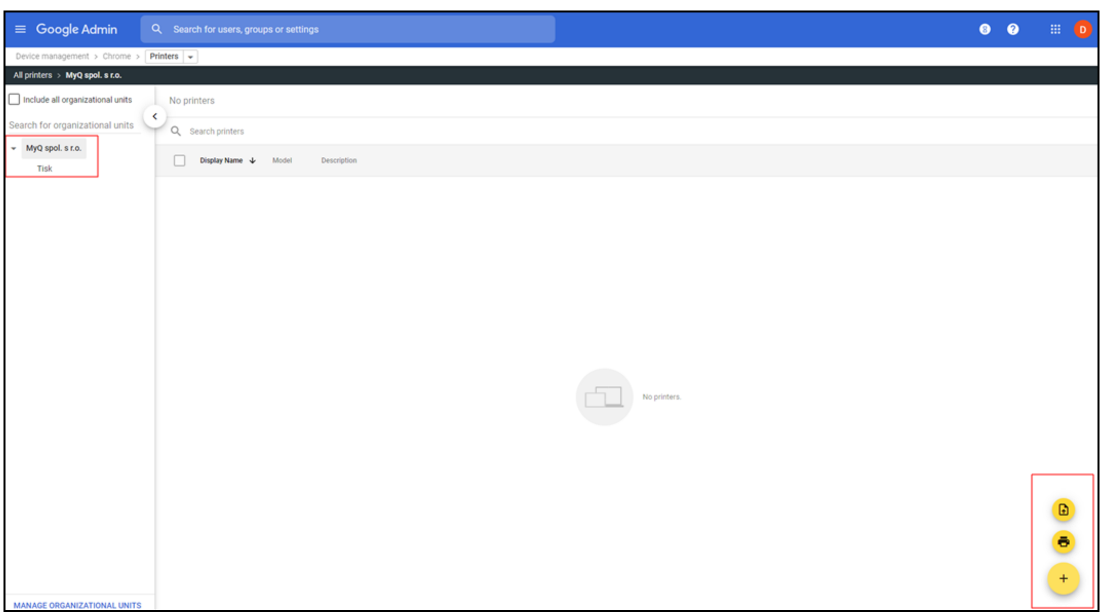


FIGURE 10.9. Google Admin Console - Select organizational units and add new printers

5. In the **Add Printers** window, fill in the mandatory fields and adjust the device URL *https://{hostname}:{port}/queue/{queue-name}* according to your own configuration.

6. Select **ADD PRINTER** and the new printer is now created.

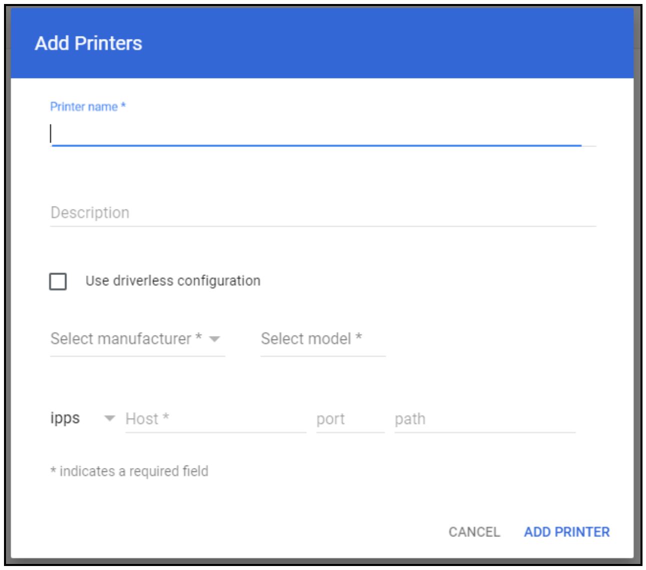


FIGURE 10.10. Google Admin Console - New printer settings

7. Select the new printer to confirm if the IPPS settings are applied according to the organization's configuration

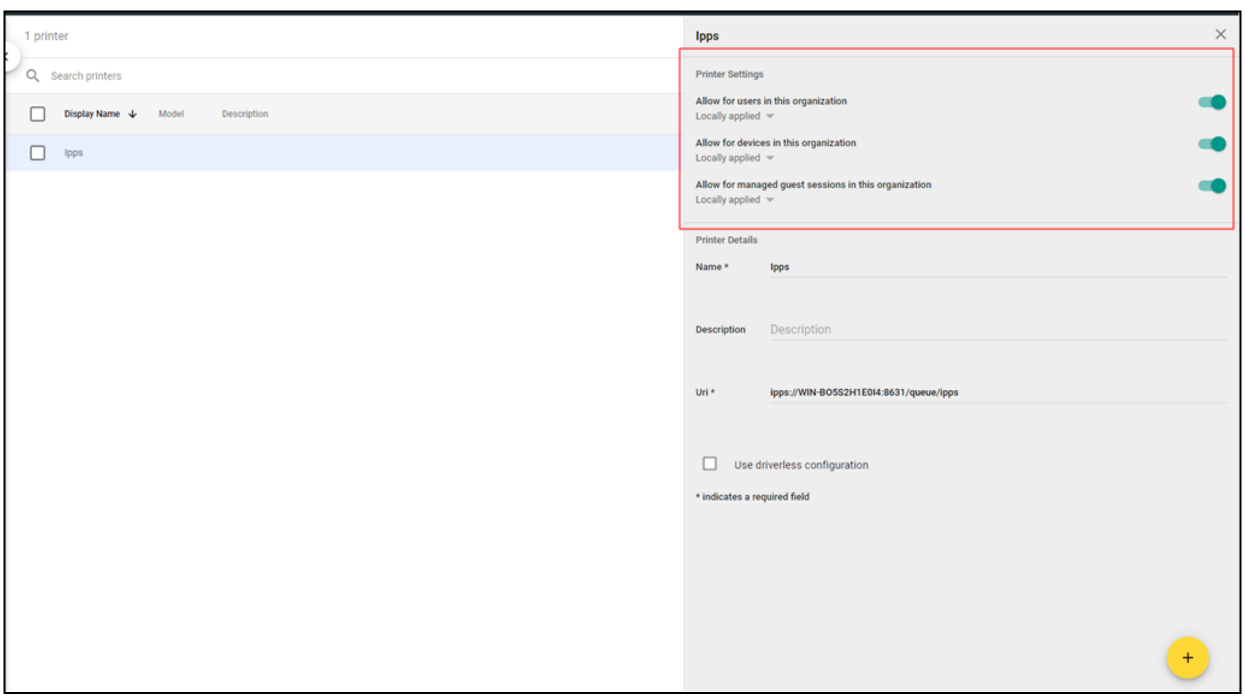


FIGURE 10.11. Google Admin Console - New printer IPPS settings check

WARNING: The driverless configuration is not recommended as there might be jobs that cannot be printed this way. There is no error in the Chromebook when this happens and not on MyQ's side either, since the job never reaches MyQ.

To include user accounts and file names in the jobs printed via Chromebook, do the following:

1. In the Chromebook, sign in to your Google Admin Console in https://admin.google.com/ using an administrator account.

2. In the Google Admin Console, select **Devices**, **Chrome**, **Settings** and then **Users & browsers.**

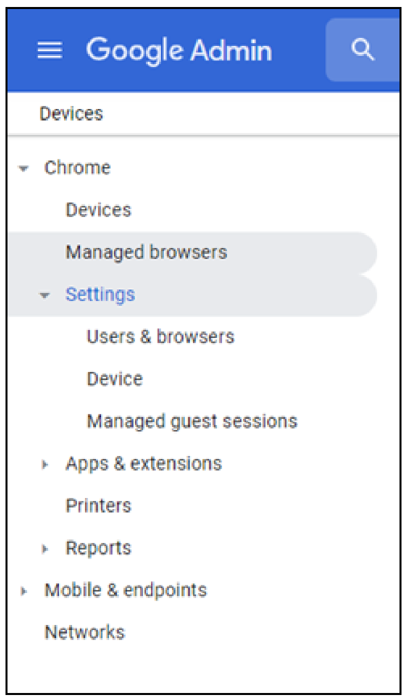


FIGURE 10.12. Google Admin Console - Device Management

3. In the Users & browsers settings window, scroll down to **Printing – Native print job information**. From the drop down, select *Include user account and filename in print job.*

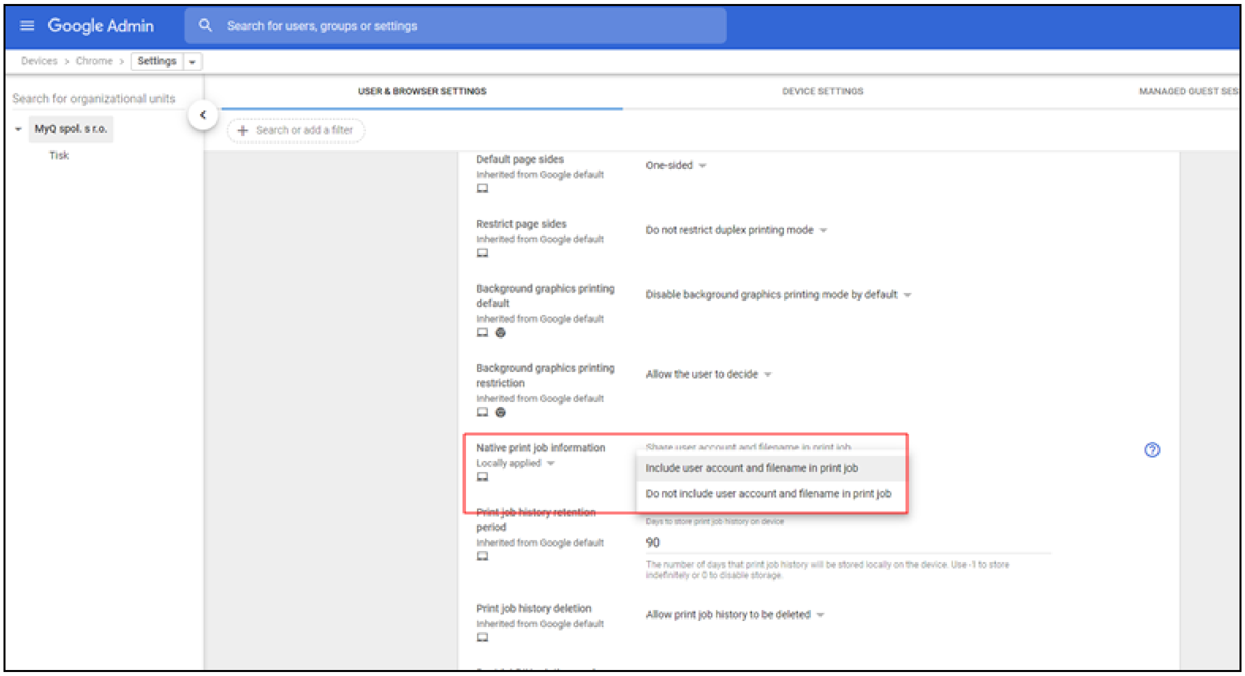
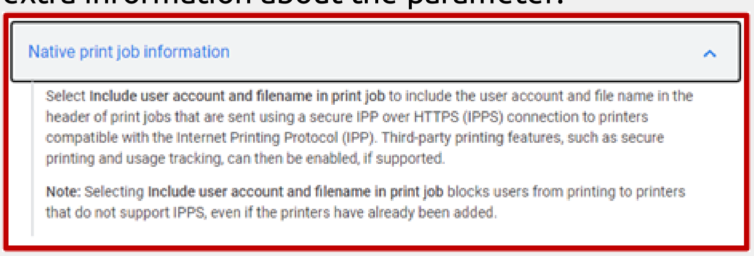


FIGURE 10.13. Google Admin Console - User & browser settings

INFO: Click on the question mark icon next to **Native job information**, to see extra information about the parameter:



If you want to (optionally) deploy SSL certificates via the Google Admin Console, do the following:

1. In the Chromebook, sign in to your Google Admin Console in https://admin.google.com/ using an administrator account.
2. In the Google Admin Console, select **Devices** and then **Chrome** and **Networks**.

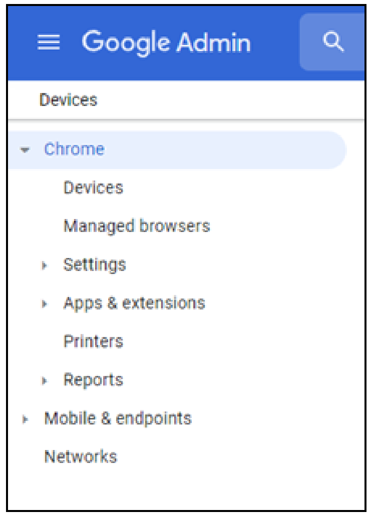


FIGURE 10.14. Google Admin Console - Device Management

3. In the Networks window, select **Certificates** and in the Certificates window, select **Add Certificate**.
4. Type a **Name** for the certificate and click **Upload** to upload your certificate.
5. In the Certificate Authority section, choose **Chromebook**.
6. Click **ADD**.

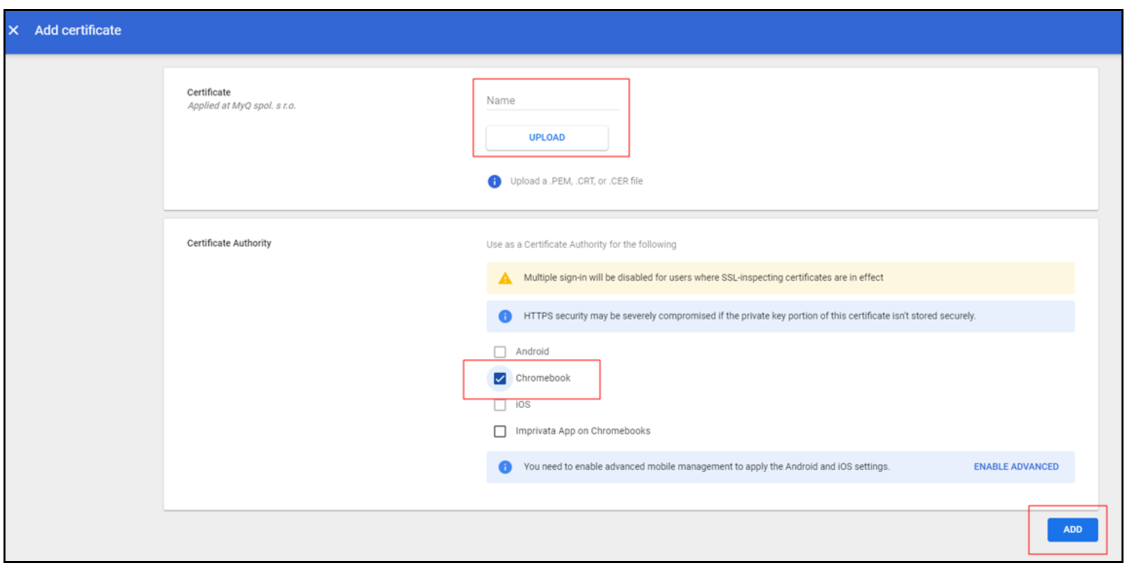


FIGURE 10.15. Google Admin Console - Upload Certificate

To deploy the certificate, use an open guest Wi-Fi network. Your Chrome devices will authenticate to Google and receive the TLS or SSL certificate. The pushed certificate will apply to all enrolled Chrome devices on the primary domain.

To verify the CA on managed Chrome devices:

- Go to chrome://settings/certificates.
- Click **Authorities**.
- Scroll down to see the newly-added CAs. CAs setup in your Admin console is highlighted as follows:

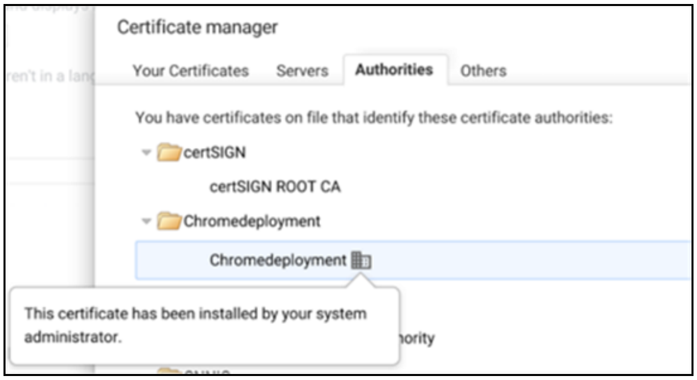


FIGURE 10.16. Certificates Management

14.1.4. IPPS via Linux

To add IPPS printing via Linux, do the following:

1. Set up a CUPS service in order to add a printer.

2. Add a printer.

    i. In the **New printer** window click **Enter URL**. See for the URL syntax the intro of this paragraph.

    i. Type the device URL in the **Enter device URL** field.

    ii. Click **Forward**.

    iii. In the **Choose Driver** pane select **Generic**.

    iv. Click **Forward**.

    v. In the next window select **IPP Everywhere** as driver. Although the selection option says IPP this protocol is used for IPPS spooling.

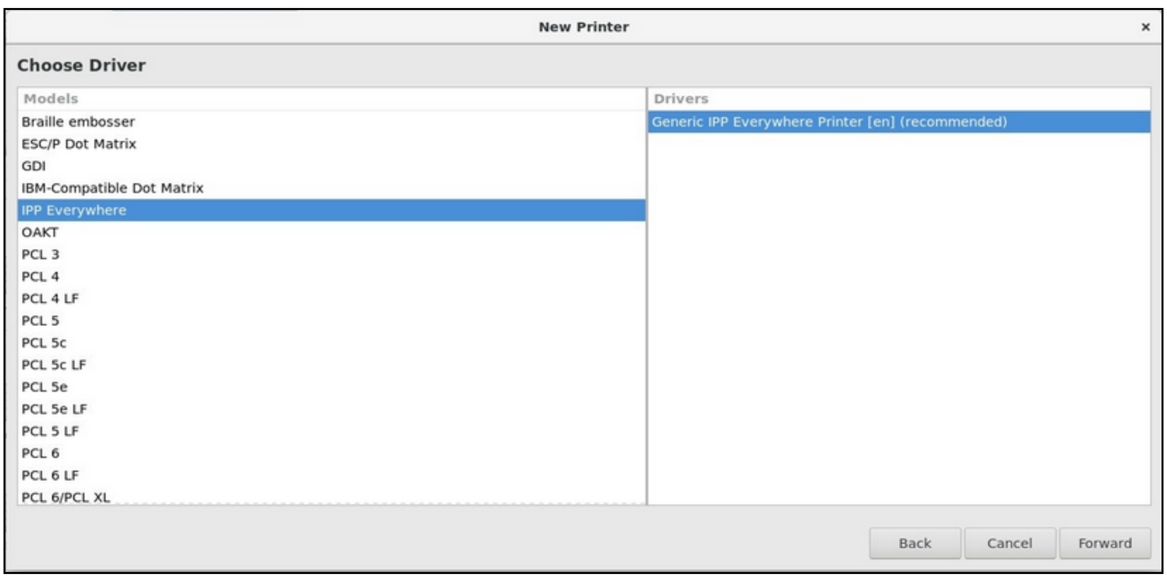


FIGURE 10.17. Selecting driver for Linux printer

    vi. Click **Forward**.

    vii. Enter the name of the printer.

    viii. Click **Finish**.

15. Methods of Printing

This topic presents several options of printing with the MyQ system. The first sections describe the basic printing methods and features available to MyQ users:

- Direct printing
- Pull Print printing
- Delegated printing
- Printing from email and from MyQ Web User Interface
- Printing from the MyQ mobile application
- Google Cloud Print to MyQ
- AirPrint and Mopria Print Service

The last two sections describe additional printing features that can be set up on the clients' workstations:

- Client Spooling
- Fallback Printing

INFO: There are other printing options, related to advanced features of MyQ, such as running MyQ on multiple servers, or to a variety of embedded terminals that can be purchased together with the MyQ system. Information about these options are provided in the respective guides describing these features and in the MyQ embedded terminal manuals.

15.1. Direct printing

With the direct printing method, users can send their print jobs to be immediately printed on a particular printing device via a dedicated queue. The queue is created especially for this device and cannot have any other devices attached to it. As soon as MyQ receives the job, it sends it to the printing device to be printed.

From the user's point of view, it works in the same way as the common method of print where the job is sent directly to a selected printing device. The main difference is that MyQ collects the job data to be used for reports and accounting.

For information on how to create a direct print queue, see *"Queues "* on page 173.

INFO: Users that send their jobs using this method do not need to be identified on the printing device and therefore no terminal is needed there.

15.2. Pull Print printing

Whereas the previous printing method is intended to be direct and quick, the pull print method is used for the opposite reasons. With this method, users can send a print job to be held on the MyQ server for as long as they need and select from a number of printing devices where it can be printed.

To print the job, the user just needs to authenticate themselves on the printing device terminal. After the authentication, the job is either immediately printed or displayed on the terminal touch panel, where it can be managed by the user. Depending on the type and settings of the terminal, users might have either one, or both of these options.

For information on how to create a pull print queue, see *"Queues "* on page 173.

15.3. Delegated printing

The Delegated printing feature is an extension of the pull print printing method that allows users to share their print jobs with a specified group of other users. These users can release the jobs on an embedded terminal in the same way they would release their own jobs.

The users that are allowed to print jobs of a certain user (or a certain group of users) are called their delegates. The delegates can be designated by the users themselves or by the MyQ administrator. When a user sends a job to MyQ, they can decide to share it with their delegates. Jobs that are to be shared have to be sent via the Delegated printing type queue.

Two settings are necessary to enable this feature: the delegates have to be defined and the Delegated printing queue has to be created and be accessible to the user or group. For information on how to define the delegates, see *"Selecting delegates for the user"* on page 123 or *"To select delegates for the group, do the following:"* on page 128. For information on how to create and set the Delegated printing queue, see *"Queues "* on page 173.

15.4. Printing from email and from the MyQ Web User Interface

MyQ enables users to print documents from the MyQ web user interface or by sending an email to a special email address. It supports printing the following source formats:

- pdf/a
- jpeg, bmp, tif, png
- txt (UTF8)
- MS Office and LibreOffice documents: doc, docx, xls, xlsx, ppt, pptx, odt, ods and odp. (You have to have the corresponding suite installed on the server.)
- email body in plain text and HTML

The minimal required version of MS Office is MS Office 2013 32bit with the latest service pack. This means that MS Office 2013, 2016, 2019, and O365 32-bit are supported.

If only one of the tools (MS Office or LibreOffice) is installed, it is used for all formats. If both tools are installed, MS Office formats are used by MS Office, and LibreOffice formats by LibreOffice (recommended solution).

After the MS Office/LibreOffice installation, MyQ services need to be restarted in order to start recognizing these formats.

NOTICE: All print jobs sent from email, web user interface or mobile apps are automatically assigned to the **Email_Web** queue and can be printed only on printing devices assigned to this queue.

15.4.1. Setting up the print from email and from the MyQ Web Interface

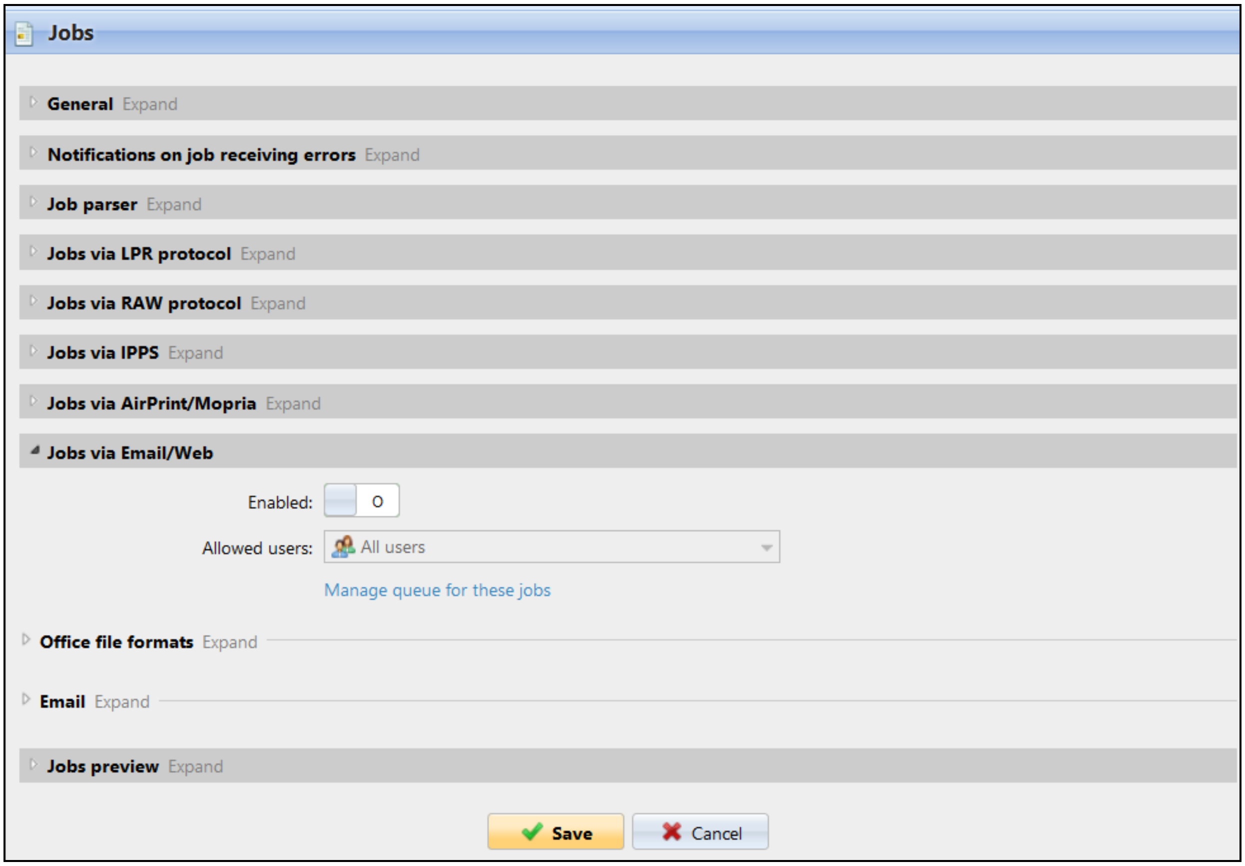


FIGURE 11.1. The **Jobs via Email/Web** section of the **Jobs** settings tab

INFO: Jobs uploaded by the Web UI are limited to 50MB, while jobs send via email are limited to 500MB per email message, all attachments included.

To enable and setup the print, do the following:

On the **Jobs** settings tab, under **Jobs via Email/Web**, set the following parameters:

1. Enable the **Jobs via Email/Web** option.
2. Select the users that are allowed to use this function.

NOTICE: If you select the **Always generate a new PIN after a job is received** option, a new PIN is generated every time a user sends an email with a print job. If the user already has a PIN, it is replaced by the new one.
If you select this option, make sure that you select the **Send new PIN via email** option on the **Users** settings menu, under **PIN**. Otherwise users do not receive the new PIN and cannot access their MyQ accounts.

15.4.2. Printing documents from the MyQ web user interface

If the **Jobs via Email/Web** option is enabled, all users with rights to the **Email_Web** queue have the **Print File** button displayed on their web user interface account. They can click this button and insert print jobs directly to MyQ.

INFO: MyQ Smart and Enterprise users have access to credit, quota and projects when printing from the MyQ web interface.

15.4.3. Printing documents from email

If the **Jobs via Email/Web** option is enabled, a user can print a document by attaching it to an email and sending to a special email account dedicated to print.

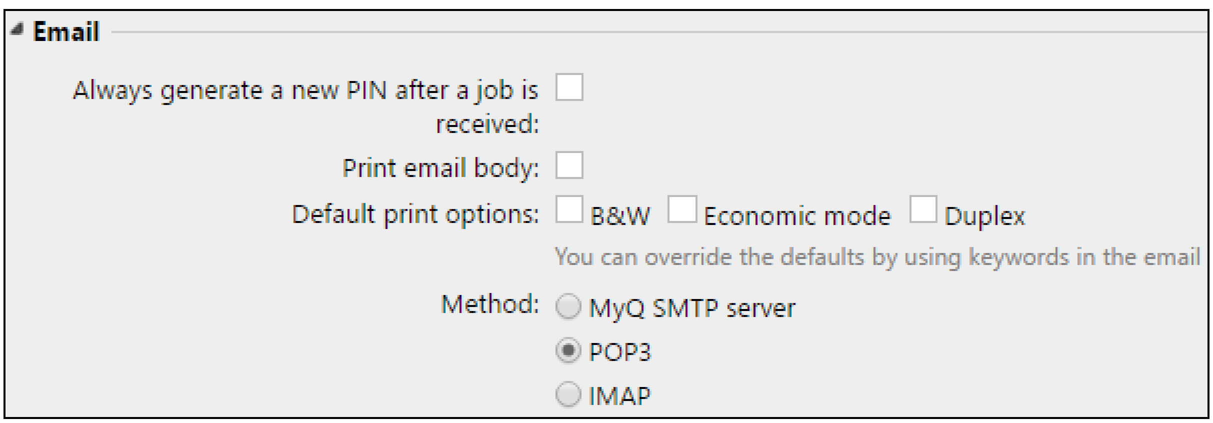


FIGURE 11.2. Settings of the email printing feature

You can enable users to print email body and restrict the print to monochrome, economic or duplex mode by selecting one or more **Default print options**.

In addition, users can change parameters of their print jobs by adding keywords to email subject. These changes have priority over the **Default print options** selected in MyQ. Users can choose from the following keywords: **#color** (color print), **#mono** (monochrome print), **#duplex** (print on both sides of a paper), **#simplex** (print on one side of a paper), **#ecoon** (toner-save print mode on), **#ecooff** (toner-save print mode off). They can be used as any part of the subject and do not have to be separated. For example, email with the **MyPrintJob #mono#duplex** subject will force the job to be printed in monochrome and duplex.

Setup of email printing

There are two ways of receiving the print jobs sent via emails: you can either use MyQ as a SMTP server and forward all emails with the print jobs there, or you can use MyQ as an email client that fetches all emails from a specific email account on your server via POP3 or IMAP protocol. These two methods are described in the following two sections:

Forwarding emails to the MyQ SMTP server

With this option, MyQ listens on the MyQ SMTP server port set on the **Network** settings tab and receives any email starting with **print** as the email with the print job. If you select this option, you need to take the following steps:

1. On your company mail server, create an email account for receiving print jobs.
2. Redirect the sent emails from this address to **print@[IP/hostname]**, where **IP/hostname** is either the IP address of MyQ server, or its hostname. Any email received on this address will be processed as a print job and its owner will be identified by their email address.

Receiving print jobs via POP3 or IMAP

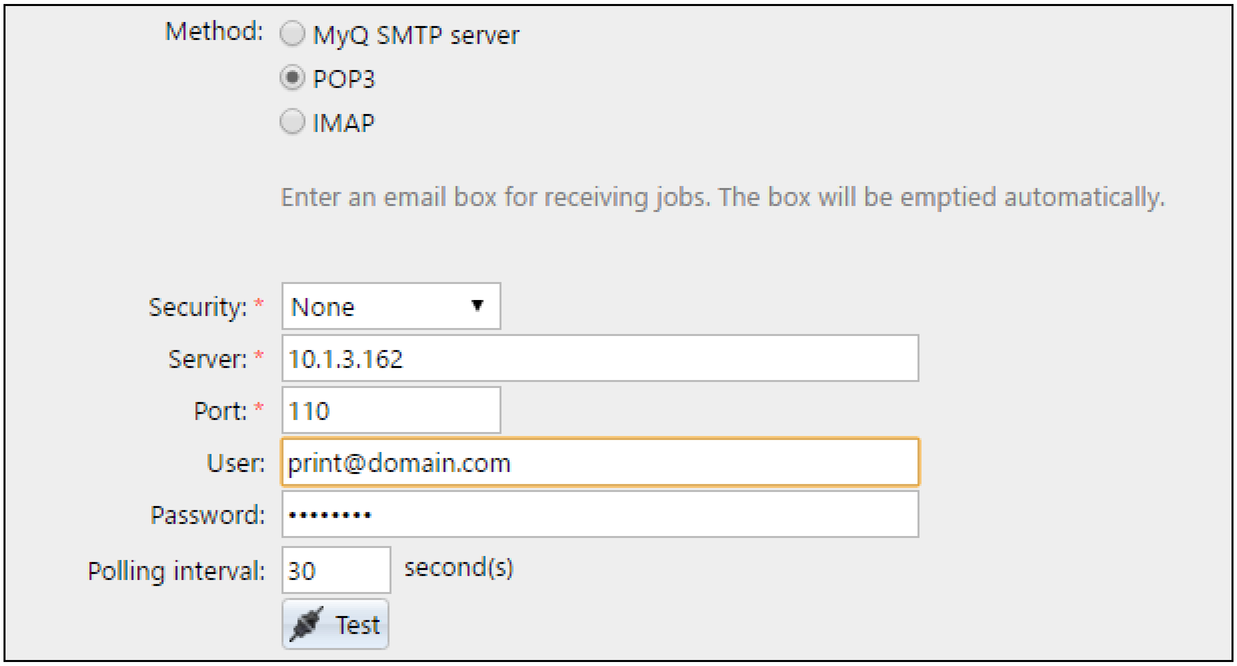


FIGURE 11.3. Setting POP3 and IMAP on the **Jobs** settings tab, under **Jobs via Email/Web**

1. On your company mail server, create an email account for receiving print jobs.

2. On the **Jobs** setting tab of the MyQ Web Interface, under **Jobs via Email/Web**, do the following:

    I. Under **Method**, select the protocol that you want to use. Additional options appear on the tab: **Security**, **Server**, **Port User**, **Password**, **Polling interval** and **Test**.

    II. Ensure that the protocol port is correctly set in the **Port** text box.

    III. If you want to secure the communication between MyQ and the mail server, select one of the security options (SSL, Start TLS).

    IV. Enter the IP address or the hostname of the mail server in the **Server** text box.

    V. Enter the address of the email account that will receive the print jobs in the **User** text box.

    VI. Enter the password of the email account in the **Password** text box.

    - By changing the value of the **Polling interval** setting, you can change the interval after which MyQ fetches new emails from the mail server.

    - By clicking **Test**, you can test the connection to the mail server.

15.4.4. Processing documents in Office formats

On the **Jobs** settings tab, under **Office file formats**, select a method of processing the Office format files. You can select from two methods:

- **Convert to PDF** - MyQ opens the document in the Office application, converts the job to PDF and sends it directly to the printing device. The printing device has to support direct printing of the PDF format.

- **Via a Windows printer** - MyQ opens the document in the Office application and prints it using a selected windows printer (print driver). (See *"Printing via Windows printer"* on page 229.)

The corresponding office package (in 32bit) has to be installed on the MyQ account.

After the MS Office/LibreOffice installation, MyQ services must be restarted for the system to start recognizing these formats.

NOTICE: For processing documents in Office formats, it is recommended to run MyQ service under a new local admin account rather than the default Local System account.

Creating a new account for MyQ

1. Create a new local admin account with full administration rights.

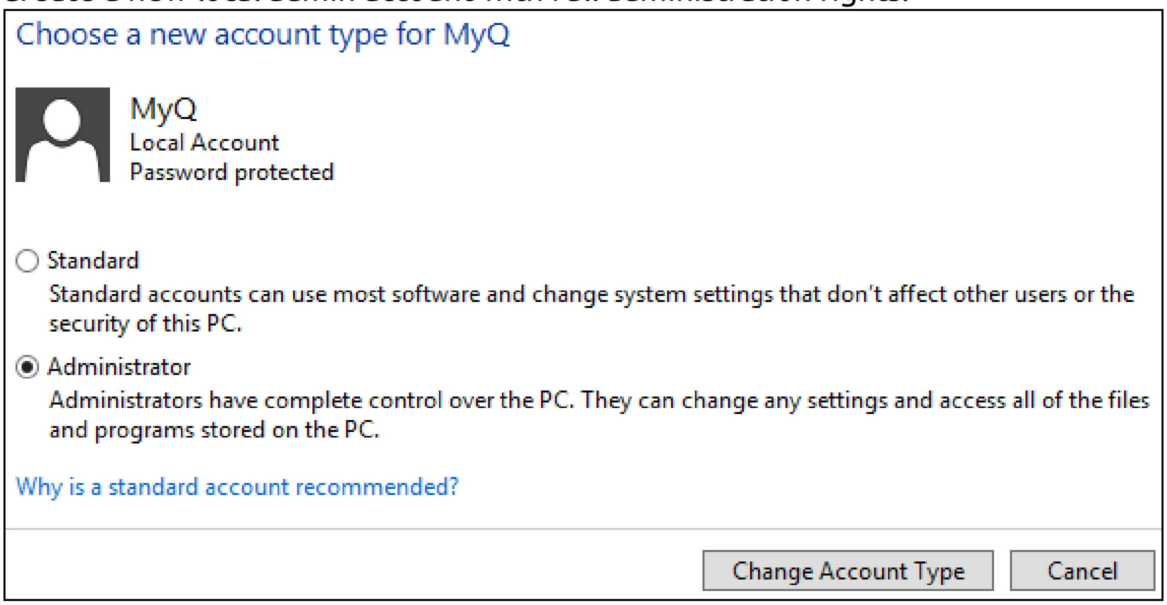


FIGURE 11.4. Changing the new account type to Administrator

2. Log on to the newly created account.
3. Install the corresponding Office package (in 32bit) on the MyQ server.
4. Run all the applications that will be used for the conversion (Word, Excel, PowerPoint, LibreOffice, etc.) and close all welcome screens and dialog boxes that might appear on the application startup.

5. Open the MyQ Easy Config application and go to the **Settings** tab. Under **MyQ Services Windows Account** select **Custom account**. Then, either browse for the user, or enter the user's credentials and click **Change**. MyQ services are then automatically restarted.

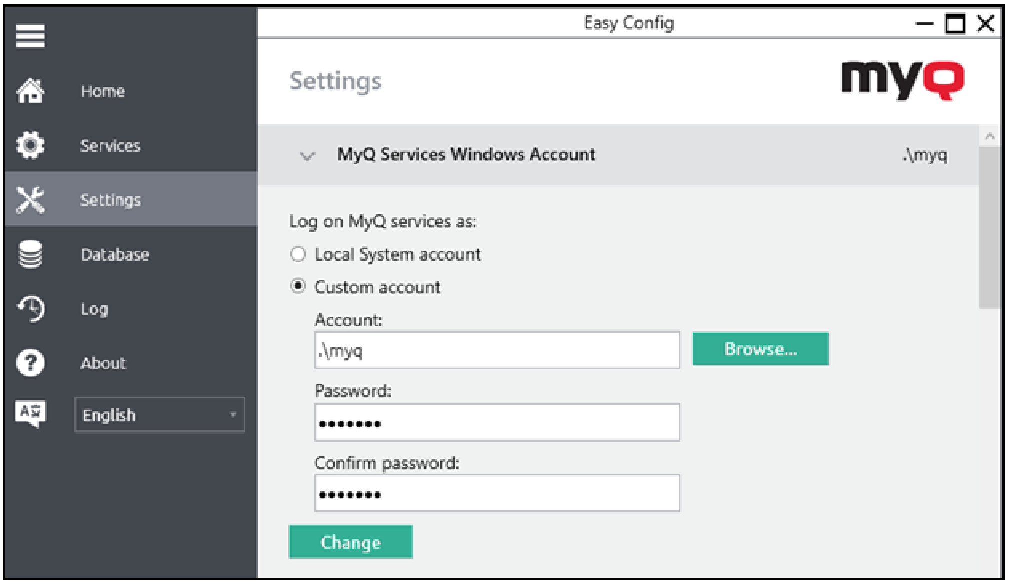


FIGURE 11.5. MyQ Easy Config - Changing MyQ Services Windows Account

Printing via Windows printer

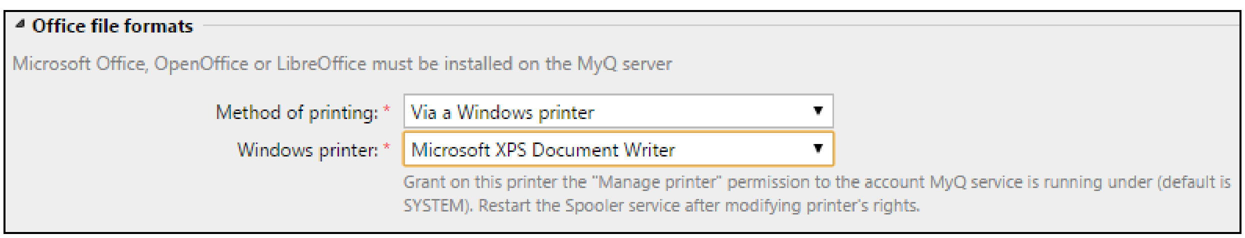


FIGURE 11.6. Printing via a Windows printer option on the **Office file formats** section on the **Jobs** settings tab

With the print **Via a Windows printer** option, you have to select one of the printers that are locally installed on the MyQ server. The selected printer is used for processing the print jobs. You also have to change the printer security settings to allow MyQ to print from the print driver.

To select the printer

1. On the **Jobs** setting tab, under **Office file formats**, under **Method of printing**, select the **Via a Windows printer** option. The **Windows printer** setting appears.

2. On the setting drop-down list box, select the printer that you want to use.

To change the security setting

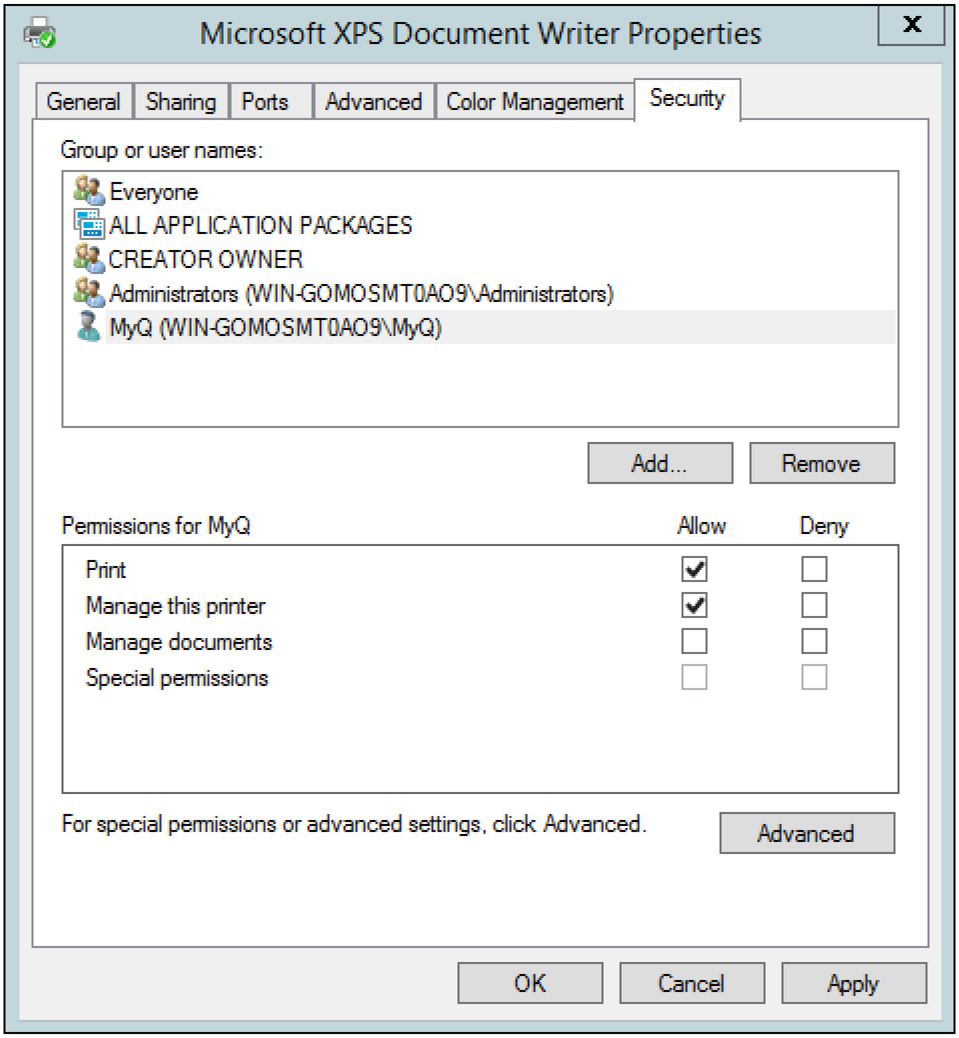


FIGURE 11.7. Allowing printing and print management on the printer Properties dialog box

1. In Windows, under **Devices and Printers**, right-click the printer. A drop-down box appears.

2. In the drop-down box, click **Printer properties**. The printer properties dialog box appears.

3. In the dialog box, open the **Security** tab.

4. On the tab, allow print and managing printers to the account under which the MyQ services are running.

5. Leave the setup.

15.5. Managing print jobs via the MyQ Mobile Printing application

If you enable print management via the MyQ mobile application in MyQ, users can use the application to manage print jobs and send them to the print server directly from their mobile phones, securely release the jobs on selected printing devices, unlock printing devices via scanning a QR code and recharge MyQ credit.

To enable the feature, do the following:

1. On the MyQ Web Interface, open the **Mobile Application** tab. (At the top-left corner, click **MyQ**, then click **Settings**, and finally click **Mobile Application**.)

2. On the **Mobile Application** tab, under **General**, set **Enabled** to **ON**. If you want enable users to unlock printing devices and release print jobs via the mobile application, select the **Enable logging in to a printer and releasing print jobs** option.

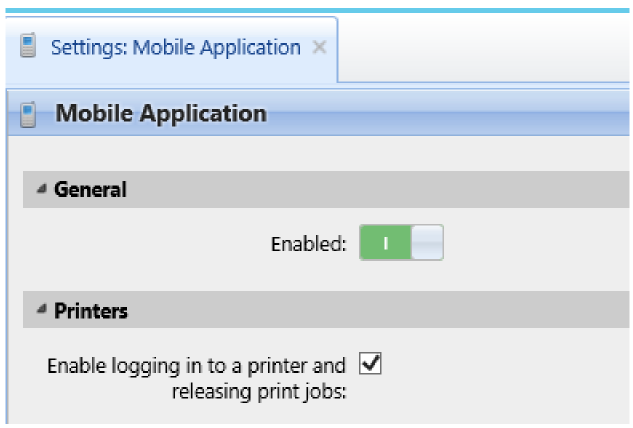


FIGURE 11.8. The Mobile Application settings tab

In the **Mobile Application** section of the **Network** settings tab, you can set the server hostname or IP address and the communication port for the MyQ mobile applications which will be used when the corresponding QR codes are generated.

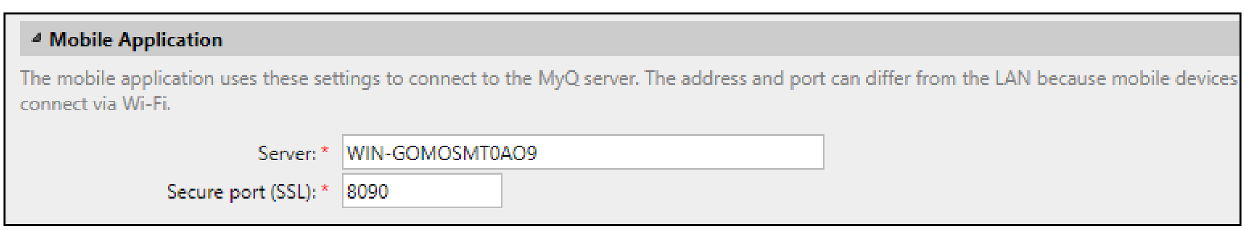


FIGURE 11.9. Hostname of the MyQ server and the secured port for the MyQ mobile application

INFO: You can generate a QR code for a printing device on the list of printing devices on the **Printers** main tab. Right-click the printing device there, and then click **Print QR code**. For more information about Mobile applications, see Mobile terminals manual.

15.6. Google Cloud Print to MyQ

Google Cloud Print is a service that connects your home and work printers to the web. Since your printer is connected to the web, you can print to it from anywhere, using any Internet-connected device, including PCs, Macs, Chrome books, phones, or tablets. Google Cloud Print integrates with the mobile versions of Gmail and Google Docs, allowing users to print from their mobile devices.

In several steps, you can synchronize the MyQ Printing Environment with Google Cloud Print and enable users to print to MyQ via this feature. You need to create a dedicated queue in the MyQ Web Interface, install a print driver pointed to this queue on the MyQ server and use one Google account to share this printer. After this is done, you need to add the names of the Google accounts of your users as aliases.

Print jobs sent to MyQ via Google Cloud Print begin with the email address of the sender. MyQ uses the first part of the address to distribute the print job to the user.

INFO: Google will end the support for Google Cloud Print as of 31-12-2020.

NOTICE: We recommend you to create a new Google account for the Google Cloud Print feature.

To set up the printing, follow these steps:

1) In the MyQ Web Interface, create a new print queue for Google Cloud Print.

I. Open the **Queues** main tab. (Click **MyQ**, and then click **Queues**.)

II. On the tab, click **+New Queue**. The properties panel of the new queue opens on the right side of the screen.

III. On the panel, enter a name of the queue, for example GooglePrint, and set the **User detection method** and the **Regular expression** to the following values:

- **User detection method**: **Detect user from the job name**
- **Regular expression**: **\b([a-z0-9._%+-]+)@[a-z]+.[a-z]{2,3}\b**

Other settings should be set according to the desired behavior of the queue (see *"Queues "* on page 173).

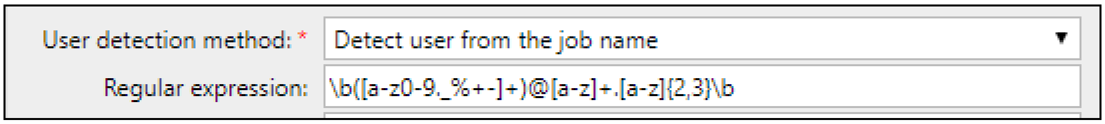
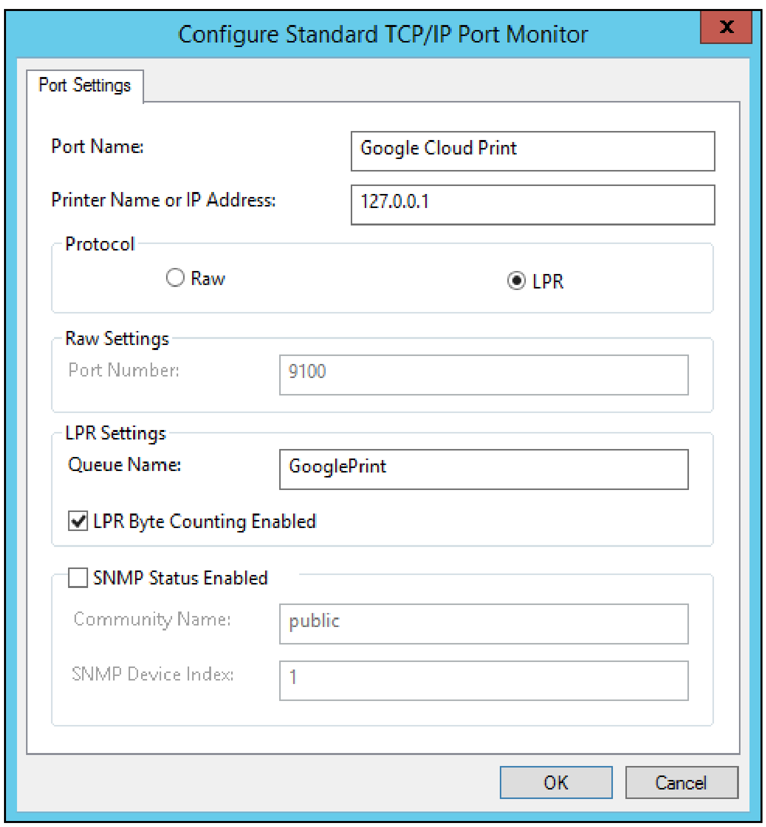


FIGURE 11.10. Settings of the queue for Google Cloud Print to MyQ

IV. Click **Save** to submit the settings.

2) On the MyQ server, install a new Windows printer with standard settings for printing to MyQ (see *"Methods of Printing "* on page 220). The **Queue Name** setting entered within the setup of the TCP/IP port must be the same as the name of the Google print queue created in **step 1)**.



INFO: The printer is installed directly to the MyQ server, so you can use the **127.0.0.1** IP address or the **localhost** hostname instead of the IP address of the server.

INFO: If you use a Kyocera driver we recommend to change the driver settings from the default values so it does not append the time information to the end of the job name. Go to: **Printer Properties** - **Advanced** - **Printing Defaults** - **Job** - **Overwrite job name** select from drop-down list **Replace existing file**.

3) Install Google Chrome to the MyQ server, then open the browser and add the printer installed in **step 2)** to the Google account that you want to use for Google Cloud Print. (see https://support.google.com/cloudprint/answer/1686197?hl=en)

4) Make sure that all users who should be enabled to print to MyQ via Google Cloud Print have Google accounts.

5) Share the printer via Google Cloud Print with the Google Accounts of the MyQ users who should be using this printer (see https://support.google.com/cloudprint/answer/2541899?hl=en).

6) In the MyQ Web Interface, add the names of the Google accounts as aliases to the users.

I. Open the **Users** main tab. (Click **MyQ**, and then click **Users**.)

II. Double-click the user to open their properties panel.

III. On the panel, next to **Aliases**, click **+Add**, and then enter the name of the user's Google account.

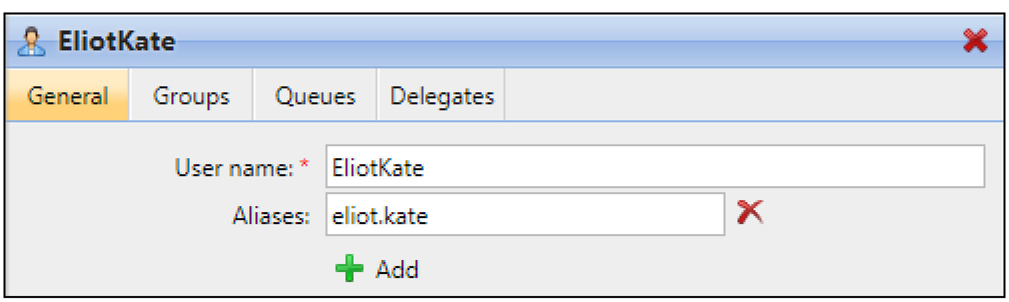


FIGURE 11.11. The user's properties panel with the alias

IV. Click **Save** to submit the changes.

7) Each user must accept the shared printer on their email account. After doing so, they can send print jobs to MyQ via the Google Cloud Print Feature.

15.7. AirPrint & Mopria Print Service

AirPrint enables users to print photos and documents from their MacBook, iMac, iPhone, iPad, or iPod touch without having to install additional software (drivers). Mopria Print Service does the same for users with an Android smart phone or tablet. Android users must download the Mopria Print Service app from Google Play.

INFO: As Admin you only have to install the Mobile Print Agent once, to give your iPhone and / or Android users access to MyQ queues.

AirPrint and Mopria Print Service are working with MyQ by exposing MyQ print queues as AirPrint / Mopria Print Service printer devices. The MyQ user connects to the company's wifi network, selects the queue where they want to send the print job and authenticates themselves with their MyQ credentials. After the first authentication, the credentials are stored on the device. Pull Print and Delegated printing queues are displayed as available printers on the user's device.

Enable AirPrint and / or Mopria Print Service

1. Make sure that on the MyQ Web UI:
   i. in **MyQ - Settings - Jobs - Jobs via Airprint / Mopria** is **Enabled**.

   ii. in **MyQ - Settings - External Systems/REST API applications** Mobile Print Agent is present.

2. Click **Show information** for the details. You need the **Client ID** and **Secret** later on.

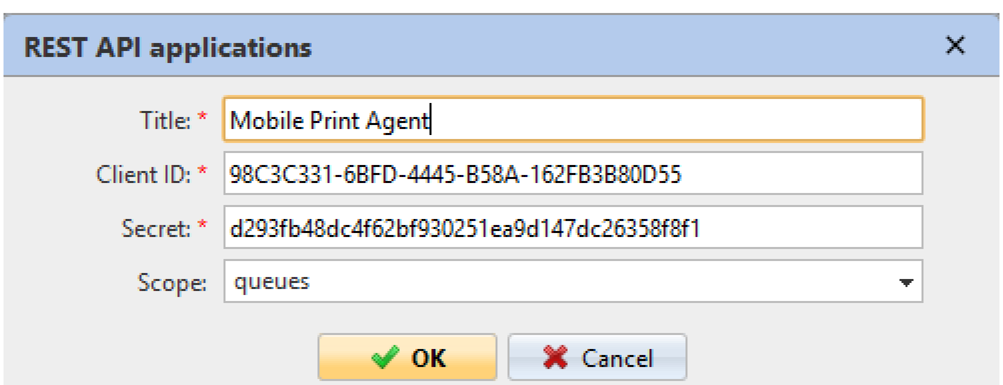


FIGURE 11.12. Mobile Print Agent details

3. Download the Mobile Print Agent from the MyQ Community portal on your network server.

4. Run the Mobile Print Agent on a network up to the point where you must enter the settings.

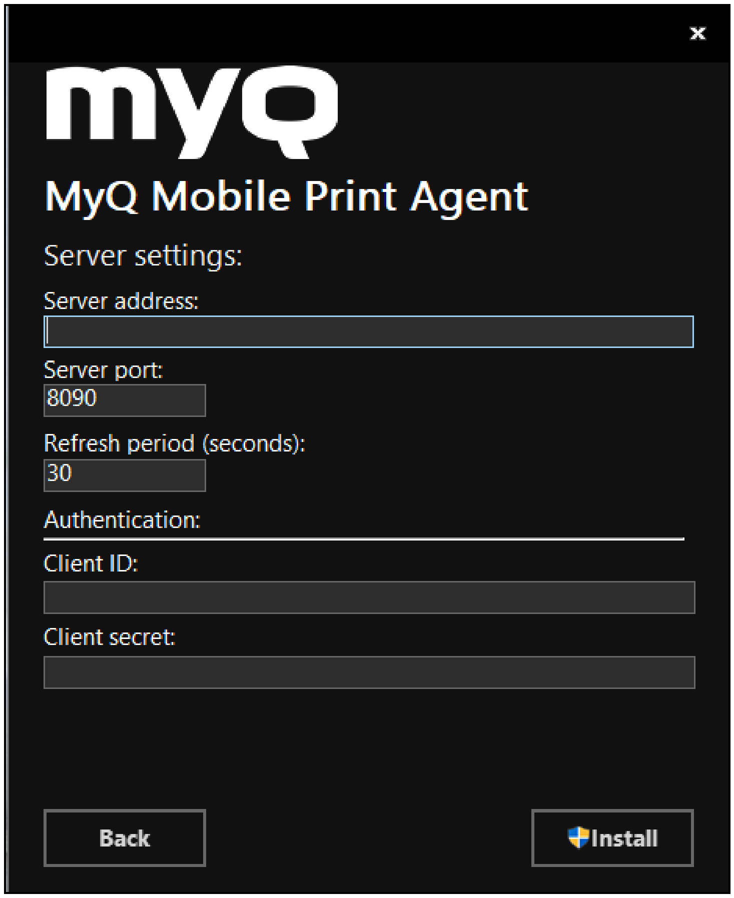


FIGURE 11.13. MyQ Mobile Print Agent Settings

5. Enter the settings:

    i. **Server address**: the IP address of the MyQ Print Server.

    ii. **Server port**: the editable port that the MyQ Mobile Print Agent will use.

    iii. **Refresh period**: The time taken to refresh the connection with the Print Server.

    iv. **Client ID**: Copy this from the MyQ Mobile Print Agent details from the MyQ Web UI.

    v. **Client secret**: Copy this from the MyQ Mobile Print Agent details from the MyQ Web UI.

6. Click **Install** and wait until the installation has finished.

INFO: The user can authenticate themselves either by their user name and password, or their user name and PIN.

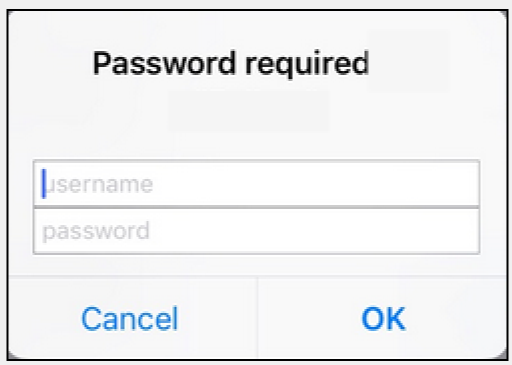


FIGURE 11.14. Entering acount credentials

15.8. Client Spooling

With the Client Spooling feature enabled, users' print jobs are not sent to the MyQ server, but stay stored at the users' computer. After they authenticate themselves at a printing device and select the jobs to be printed, the jobs are released from the computer directly to the device. This method dramatically decreases traffic to MyQ server and is suitable especially for small offices with limited network connection to the MyQ server.

When a user prints their job while this feature is activated, only the print metadata are sent to the server and the actual print job does not leave the computer (In fact, it is stored there as a RAW file). It waits until the user authenticates themselves at a printing device and selects to print the job there. After that, the printing device notifies the server, the server notifies the computer and the computer sends the job directly to the printing device, where it is printed.

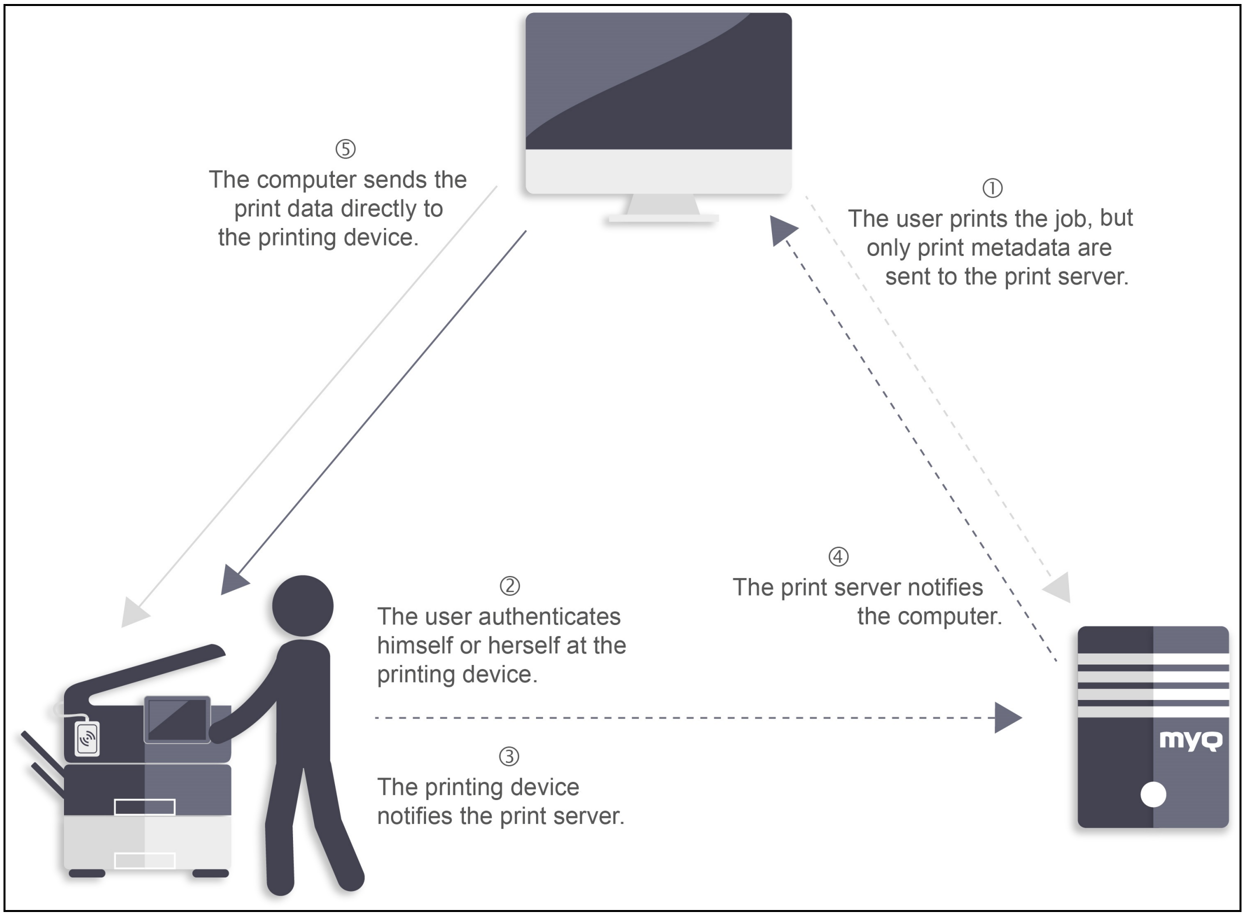


FIGURE 11.15. Scheme of the Client Spooling feature

To enable this feature, you have to set a TCP/IP port for the service, install the MyQ Smart Print Services application on the client's computer and enable the Client Spooling feature.

INFO: If the computer of the user is switched off during the sending of the job, the job is Paused on the server. The administrator can release the job once the user has switched on their computer again.

15.8.1. Setting TCP/IP port for the service

The settings in the **Configure Standard TCP/IP Port Monitor** dialog box must have the following values:

- **Printer Name or IP Address**: **127.0.0.1** (IP address of the localhost in Windows) or **localhost**
- **Protocol**: Select **LPR**
- **Queue Name**: queue name according to the MyQ server setting (same as if printing to the MyQ server**)**
- **LPR Byte Counting Enabled**: Selected
- **SNMP Status Enabled**: Deselected

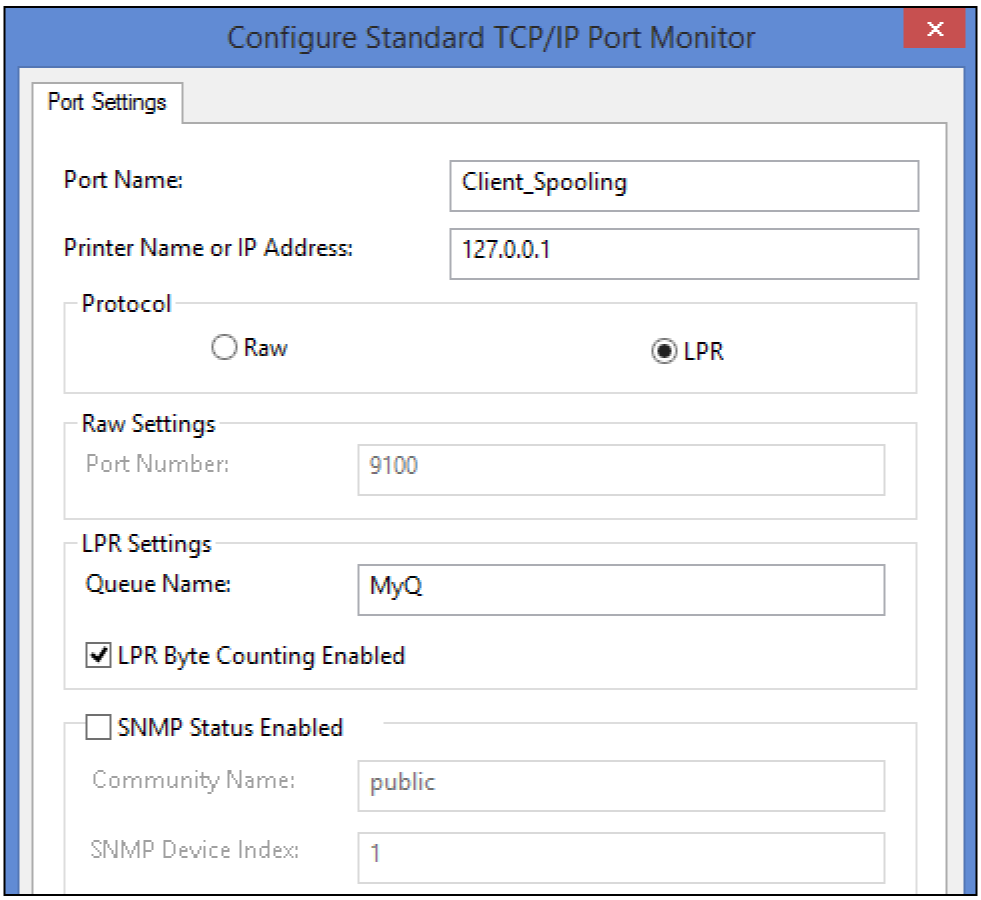


FIGURE 11.16. Settings of the TCP/IP port for the Local Spooling service

INFO: For information on how to create and edit print ports, see *"Adding print ports in Microsoft Windows"* on page 207.

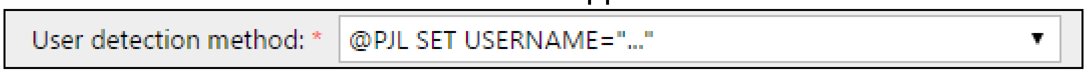
15.8.2. Installation and setup of MyQ Smart Print Services on client's computers

For information on how to install and set up MyQ Smart Print Services on client's computers, see the *Guide to MyQ Smart Print Services for Windows*.

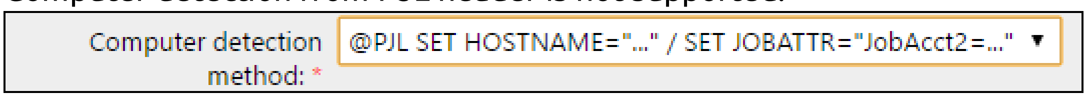
15.8.3. Limitations of the Client Spooling feature

The feature has the following limitations:

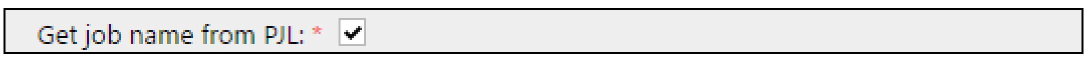
- Job processing:
  - Jobs are not parsed (number of pages, color etc. is unknown).
  - User detection from PJL header is not supported.



  - Computer detection from PJL header is not supported.



  - Job name cannot be read from PJL header.



  - Job processing defined on the queue cannot be applied.
  - User policies cannot be applied.
  - Prologue/epilogue is not supported
- If the client PC is offline, the job is not printed, but it is marked as printed on the server. User is not notified.
- Jobs cannot be marked as favorite.
- The user detection method currently only supports "Job sender".
- Smart Job Manager can send the job to the printer only via the RAW protocol.
- The jobs are deleted after 7 days. The **Delete jobs older than** option on the **System maintenance** settings tab should be set to 168 hours (as it is by default) in order to prevent discrepancy between the data stored in MyQ and the data stored on the client computer.

15.9. Fallback printing

With the MyQ Smart Print Services Windows service installed and running on the end user's workstation, you can select a backup printing device to be used for print when connection to the MyQ server is lost. The Fallback printing feature serves as an important backup tool in case of server outage. Furthermore, it can be combined with the Device spool and the Offline login features on MyQ embedded terminals to enable using hold print, pull print and delegated print on the printing device.

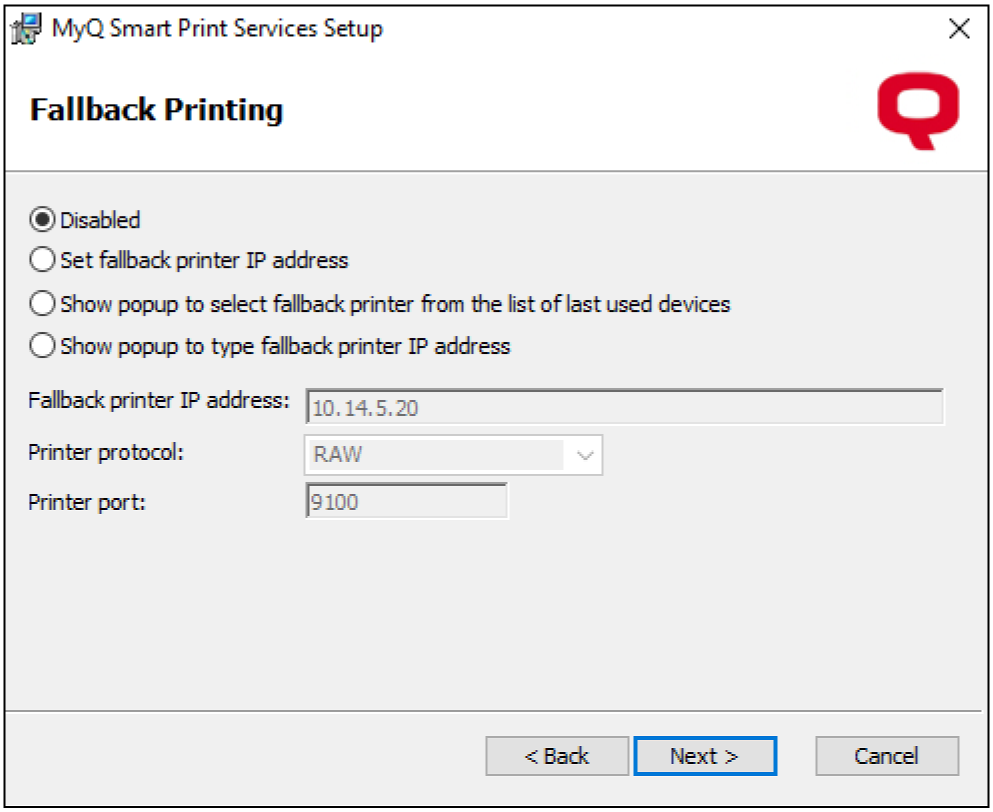


FIGURE 11.17. Settings of the feature in the Smart Print Services

See the following three sections for information on how to setup the feature.

INFO: For information about support and setup of the Device spool and the Offline login features on a particular MyQ embedded terminal, see the respective MyQ embedded manual.

15.9.1. Installation and setup of MyQ Smart Print Services on client's computers

For information on how to install and set up MyQ Smart Print Services on client's computers, see the *Guide to MyQ Smart Print Services for Windows*.

15.9.2. Changing the TCP/IP port on the print driver to localhost

After the installation, you need to configure the print driver port to send print files to the Smart Print Services, which then sends them either to the MyQ server or directly to the printing device, depending on the availability of connection to the MyQ server.

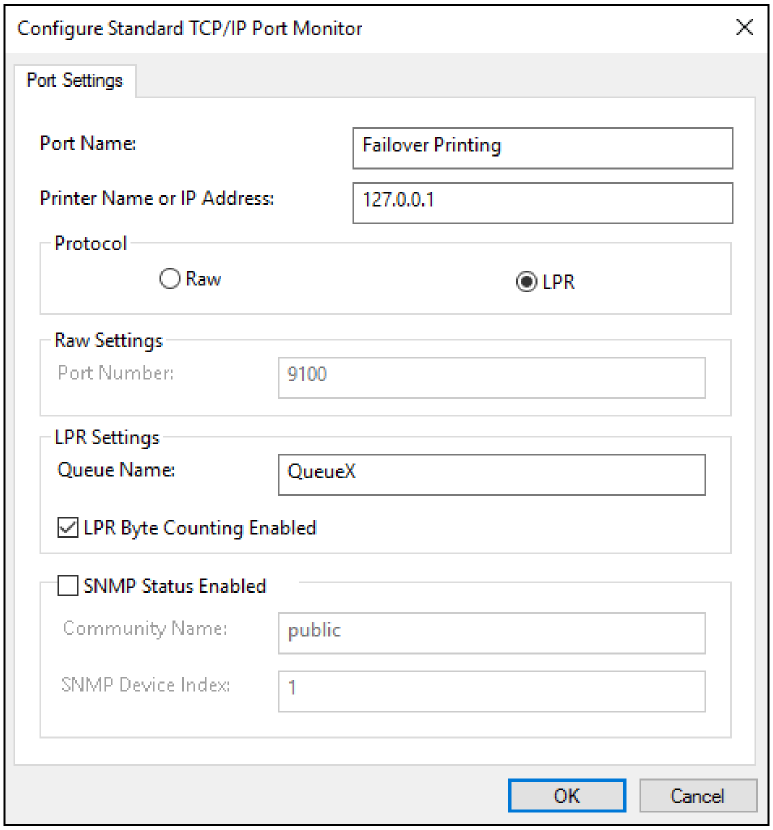


FIGURE 11.18. Settings of the TCP/IP port for the failover printing service

The settings in the **Configure Standard TCP/IP Port Monitor** dialog box must have the following values:

- **Printer Name or IP Address**: *127.0.0.1* (IP address of the localhost in Windows) or *localhost*
- **Protocol**: **LPR**
- **Queue Name**: queue name according to the MyQ server setting (same as if printing to the MyQ server)
- **LPR Byte Counting Enabled**: Selected
- **SNMP Status Enabled**: Deselected

INFO: For information on how to create and edit print ports, see *"Adding print ports in Microsoft Windows"* on page 207.

16. Jobs

This topic discusses one of the key functions of MyQ — setting and management of print jobs. It covers the following subjects:

- Print jobs global settings: Jobs Settings tab
- Print jobs list, individual jobs settings and deleting jobs: List of jobs, Editing jobs, Deleting jobs
- Print job languages: Print Job Languages
- Print jobs parser: Jobs Parser
- Notifying users and administrator about refused jobs: Notifying users and administrator about refused jobs
- Using PJL commands for additional job processing actions:Processing Jobs via PJL Commands
- You can use PHP scripts to further process the job after it is received by the MyQ server: Scripting (PHP)
- When your brand supports PDL (page description language) check out this chapter: Prologue, Epilogue
- Setting up and previewing jobs: Job Preview
- When you have a dedicated Job Archiving license and the Job Preview feature set up on the MyQ server, you can automatically archive all print jobs that are sent to MyQ: Job Archiving

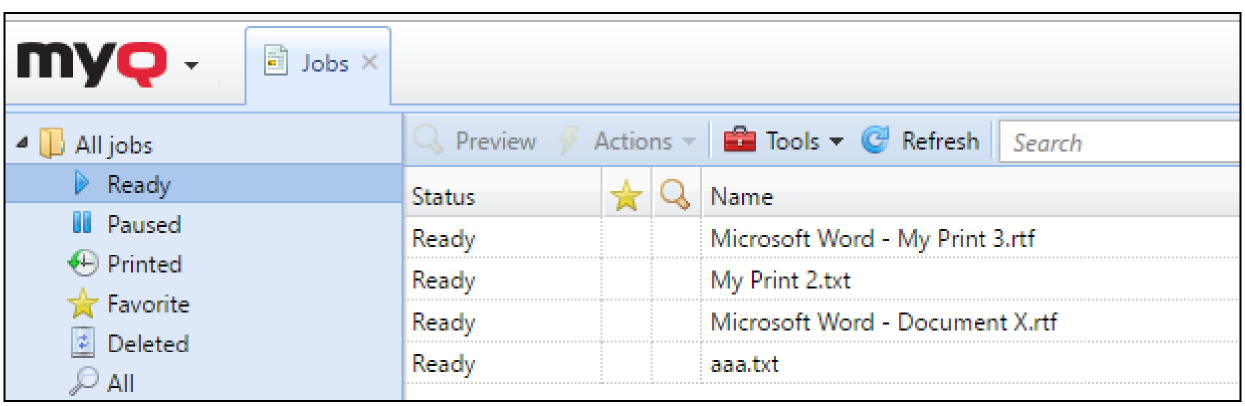


FIGURE 11.19. Jobs main tab

16.1. Jobs settings tab

On the Jobs settings tab, you can set global properties of jobs in the MyQ print environment.

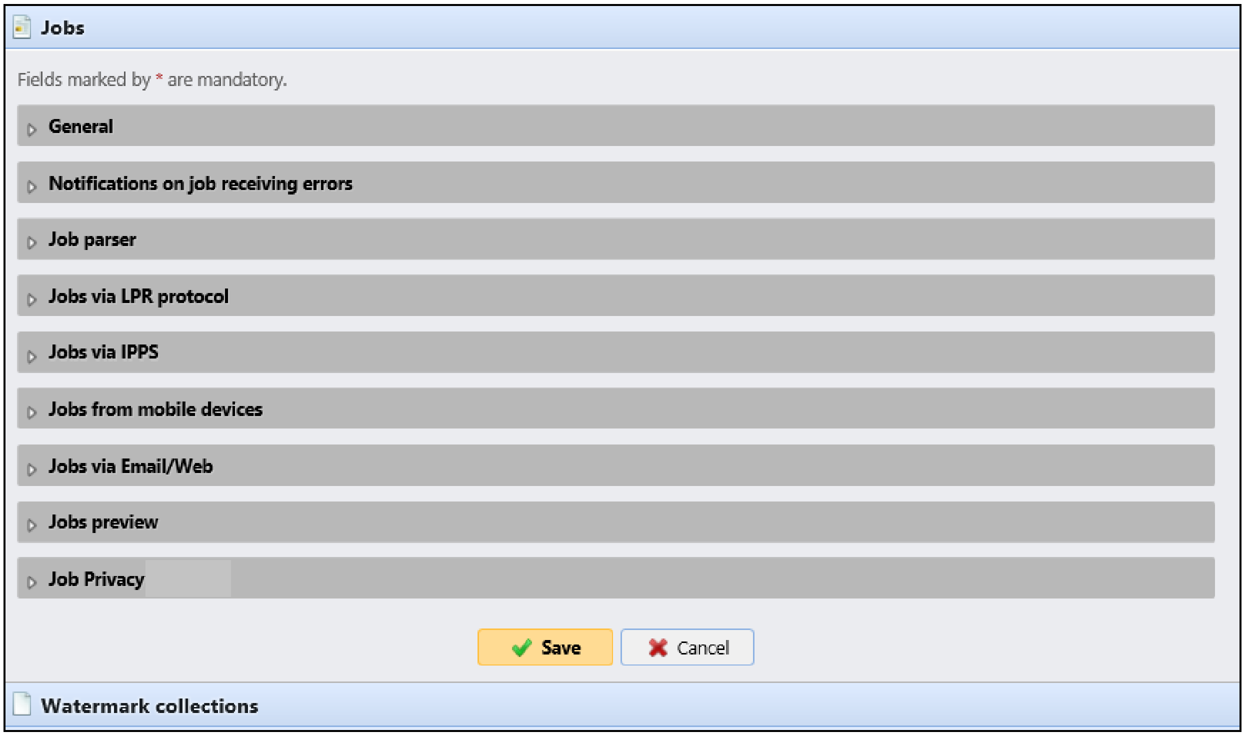


FIGURE 11.20. Jobs settings tab

16.1.1. General

Here you can set the **Maximum job size** (default size is 600 MB).

16.1.2. Notifications on job receiving errors

Check the **Notify the administrator via email** and/or the **Notify the job sender via email** boxes, to send notification emails about refused jobs.

The job sender is always notified via Smart Job Manager, if installed.

16.1.3. Job parser

Here you can activate, or deactivate the **Job parser** tool. You need to activate the Job Parser if you want to know job details (page count, color, paper size, etc.) before the job is printed. It is necessary for features like credit, quota and PHP scripting. If you don't use these features, you might want to disable the Job parser, as it is CPU intensive.

The default setting is **Enabled**.

NOTICE: For more information, see *"Job Parser"* on page 251.

16.1.4. Jobs via LPR protocol

Here you can enable the **Jobs via LPR protocol** feature (enabled by default). If it is deactivated, MyQ cannot receive print jobs via LPR.

The server knows the job sender (to be able to notify SJM about job processing) through the hostname sent by the LPR protocol. The maximum length of the hostname is 31 characters.

INFO: The maximum job size received over LPR is 100GB. Jobs with a size of over 2GB will described as: "More than 2 GB"; for jobs below 2GB, the real size will be displayed.

NOTICE: It is recommended to keep the **Jobs via LPR protocol** option enabled. If it is disabled, jobs sent from print drivers cannot be received by MyQ.

INFO: You can also change the port here, although it is recommended to use the default setting (515).

16.1.5. Jobs via Raw protocol

Activate this feature to send jobs to MyQ using the RAW protocol. The RAW protocol is the default protocol for systems that do not use Windows OS and for standard TCP/IP. The advantage of this protocol is that it sends data without further processing and has smaller packet headers.

As RAW comes without any job metadata, you must create separate queues to use this protocol and use a different port for every queue you add.

1. Set **Enabled** to green.
2. Click **+Add** next to **Port and Queue**.
3. Add a queue from the drop-down list.

4. Make sure the queue has in its **General - Jobs** section the following settings:
    a. **User detection method**: Select *User detection from PJL, Smart Job Manager* or *Detect user from the job name*

    b. If *User detection from PJL* is selected, **+Add** the desired PJL variable(s) and regular expression(s)

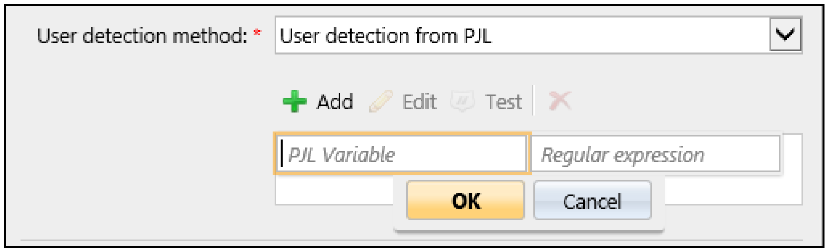


FIGURE 11.21. Jobs User detection method

5. Add another queue if needed and use another port for it. It is suggested to start from 9100 when adding a new port.
   The used ports are added to Windows Firewall.

INFO: Because there are no metadata, the queue is determined by the TCP port, the user always from the PJL and the sending computer is the client's IP address.

16.1.6. Jobs via AirPrint/Mopria

Activate this feature if you want to use mobile printing via AirPrint or Mopria.

1. Set **Enabled** to green.

The standard port is *8632* and editable.

For more information on mobile printing via AirPrint or Mopria see: *"AirPrint & Mopria Print Service"* on page 235.

16.1.7. Jobs via Email/Web

Here you can activate, or deactivate the **Jobs via Email/Web** feature, which enables receiving print jobs sent by email and from the web user interface. The email attachment is processed and sent as a print job (the email body can be processed as well). PDF/A, TXT and JPEG formats are supported. For MS Office formats, MS Office or LibreOffice must be installed on the MyQ server.

For more information about this feature and its settings, see *"Printing from email and from the MyQ Web User Interface"* on page 222.

16.1.8. Job privacy

In this section you can enable the **Job privacy** feature.

The Job privacy feature limits access to sensitive job metadata for everyone, except for the job owner and their delegates.

If Job Privacy is enabled at your Central server, it will be automatically enabled on all the connected site servers.

> **WARNING:** Once enabled, it cannot be disabled again!

To use the feature, click on the **Enable Job Privacy (irreversible)** button.

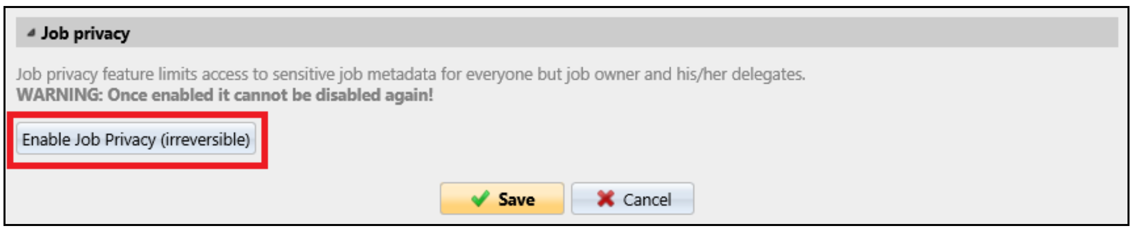


FIGURE 11.22. Enable job privacy button

In the confirmation pop-up, type your MyQ administartor password in the **Password** field, and click **Enable Job Privacy (irreversible)**.

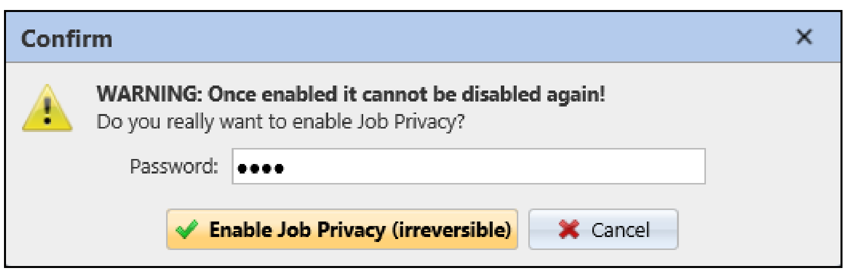


FIGURE 11.23. Job Privacy confirmation window

The Job Privacy feature is now enabled.

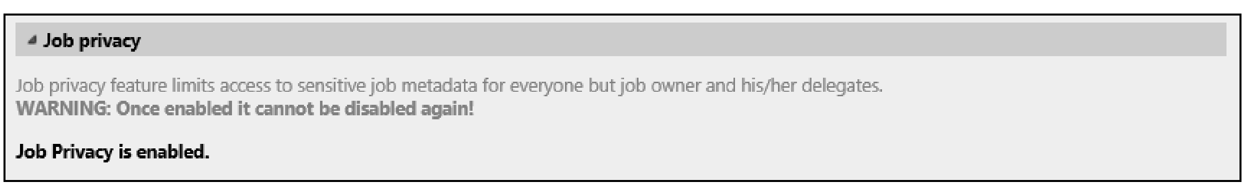


FIGURE 11.24. Job Privacy is enabled

16.2. List of jobs

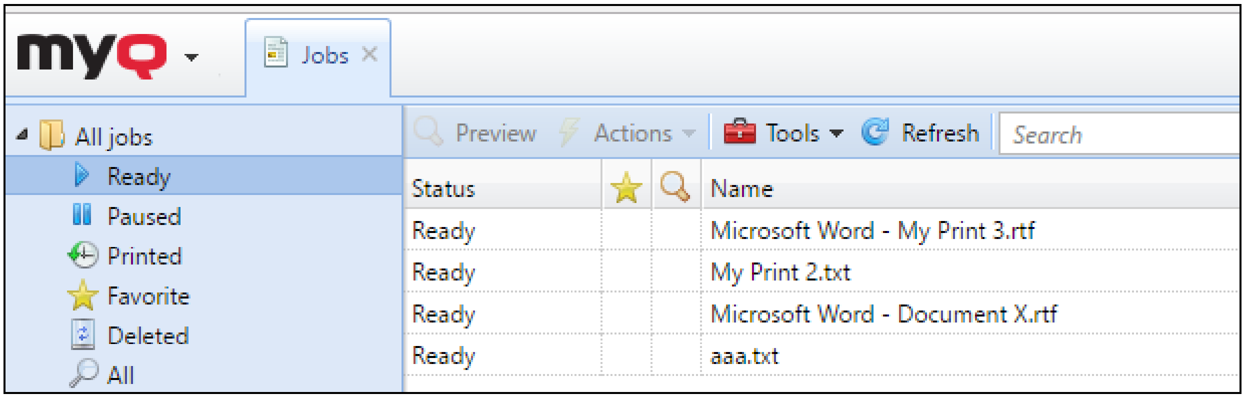


FIGURE 11.25. List of jobs on the **Jobs** main tab

On the list of jobs on the **Jobs** main tab, you can see all print jobs and information about them.

16.2.1. Jobs display options

On the left side of the **Jobs** main tab, you can see the **All jobs** drop-down menu. On the menu you can select from the following options:

- **Ready** - Displays jobs ready to print.
- **Paused** - Displays paused jobs.
- **Printed** - Displays printed jobs.
- **Favorite** - Displays favorite jobs.
- **Deleted** - Displays deleted jobs.
- **All** - Displays all jobs.

16.2.2. Job status

There are five print job status types:

- **Ready** - The job has been placed on a print queue and is waiting for users to authorize it or for preceding jobs to finish.
- **Printing** - The job is being sent to the printing device.
- **Paused** - The job has been paused by user or automatically by the MyQ system.
- **Printed** - The job has been printed and is stored on the MyQ server.
- **Deleted** - The job has been deleted from the MyQ server.

16.2.3. Favorite jobs

All print jobs except for the deleted ones can be marked as Favorite. Favorite print jobs are not automatically deleted after the period set on the **System maintenance** settings tab and remain permanently stored on the MyQ server, except for favorite jobs from external code books that are no longer available at the code book's data source.

16.3. Editing jobs

- To open a print job properties panel, double-click the job on the list on the **Jobs** main tab (or select the job, then click **Actions** on the toolbar above, and then click **Edit** in the job action dialog box). The panel opens on the right side of screen.

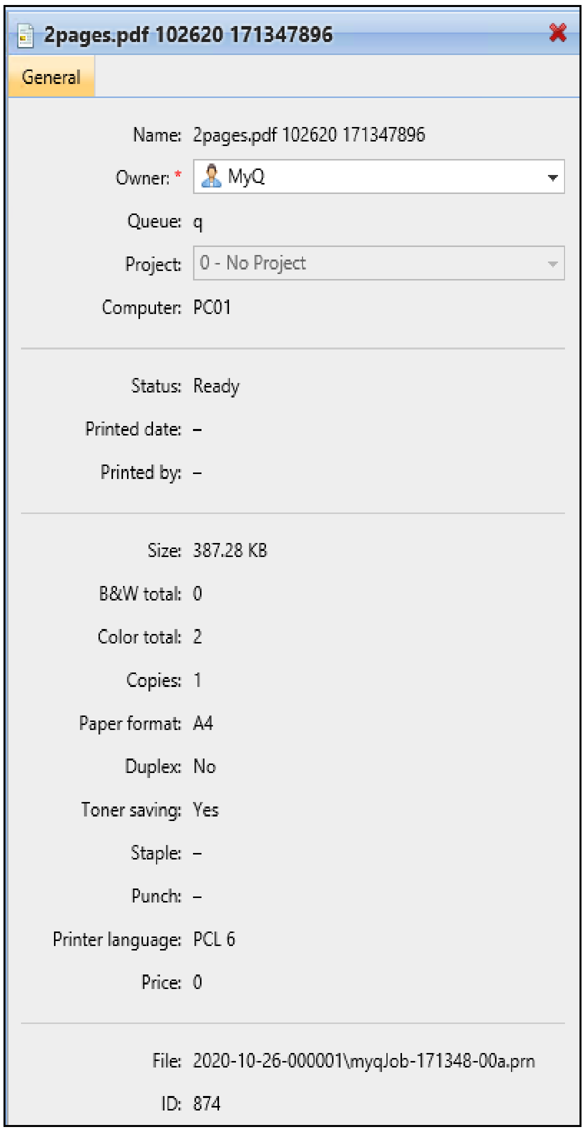


FIGURE 11.26. Individual job properties panel

On the panel, you can see general information about the print job, such as its name and ID, size, its author and the IP address of the author's computer. If you use the **Jobs Parser** tool, you can see additional data such as the B&W total, color copies, number of copies, paper format, duplex, toner saving, staple, punch, the printer language used and the price of the job. For more information about the parser, see *"Job Parser"* below.

You can also change the print job **Owner** and **Project** in their respective list boxes.

NOTICE: Only an administrator and user group leaders can change the owner of a print job. The administrator can move jobs between all users and the user group leader can move jobs between members of his subordinate group.

NOTICE: If you change the job owner, the new owner has to have rights to the current project. If you change the project, the current job owner has to have rights to the new project.

16.4. Deleting jobs

To delete selected jobs, follow these steps:

1. On the jobs list on the **Jobs** main tab, select the jobs that you want to delete, and then click **Actions**. The **Actions** drop-down box appears.
2. In the **Actions** drop-down box, click **Delete**.
   You can find the deleted jobs on the **Deleted** jobs list.

16.5. Print Job Languages (Page Description Languages)

A page description language (PDL) is a language that describes appearance of a printed page. It receives a code of a document sent to a printing device, interprets it and uses it to instruct the printing device where and how to place text and graphics onto the print page. The most common page description languages are PCL 5, PCL 6 (XL) and PostScript.

16.6. Job Parser

Part of the MyQ application is an embedded print job parser. This tool provides you with additional information about individual print jobs.

Based on those, you can set additional print job rules or control the job price before a job is printed. This is important especially for credit accounting and quotas.

The job parser supports the majority of available printer drivers in PCL5, PCL6 and PostScript.

NOTICE: The job parser is activated by default on the **Jobs** settings tab (see *"Jobs settings tab"* on page 245) during a new installation. An upgrade will keep the old setting.

The job parser provides the following information:

- page description language (PDL)
- job name
- user name
- number of B&W pages
- number of color pages
- number of copies
- Simplex/Duplex option
- paper format
- staple
- punch
- toner saving

16.7. Notifying administrator and users about refused jobs

In case a print job is refused for some reason, for example if it was sent to a wrong queue or if the user has been denied printing by a MyQ policy, the job owner and the MyQ administrator can both be informed about the event. The administrator can be notified via email and the user can be notified via email or via a small pop-up dialog box at the bottom-right corner of the screen. To be able to see the pop-up messages, users should have the **MyQ Smart Job Manager** application installed and running on their computers.

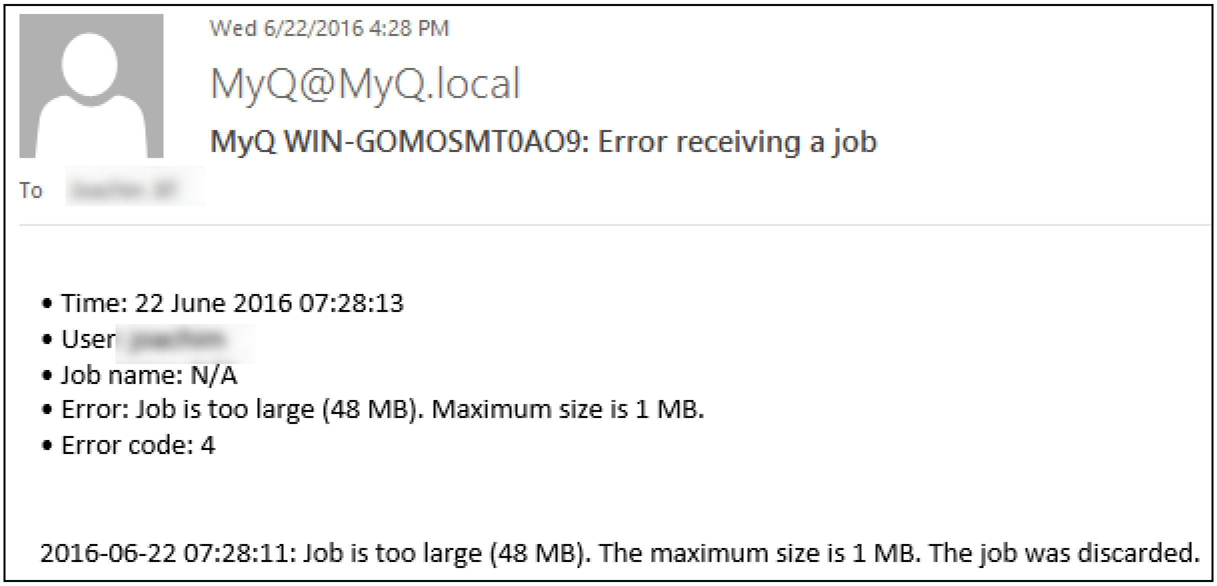


FIGURE 11.27. The email notification sent to the administrator

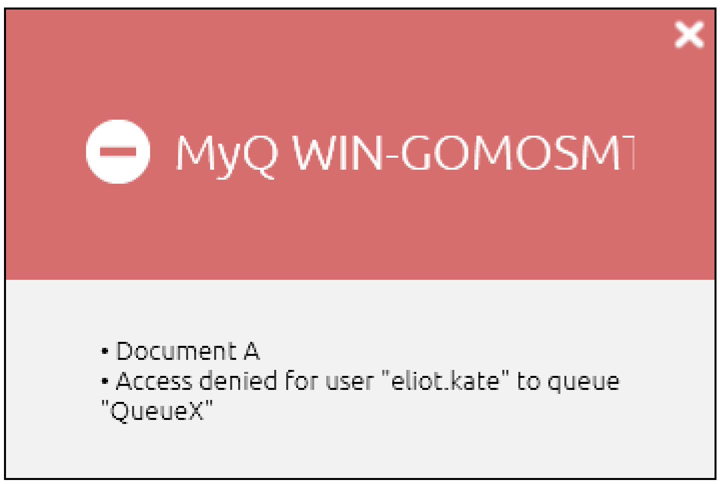


FIGURE 11.28. The pop-up notification shown on the sender's screen

NOTICE: Users are just notified about the event, whereas the administrator is informed about the problem's details.

16.7.1. To activate the notifications via email

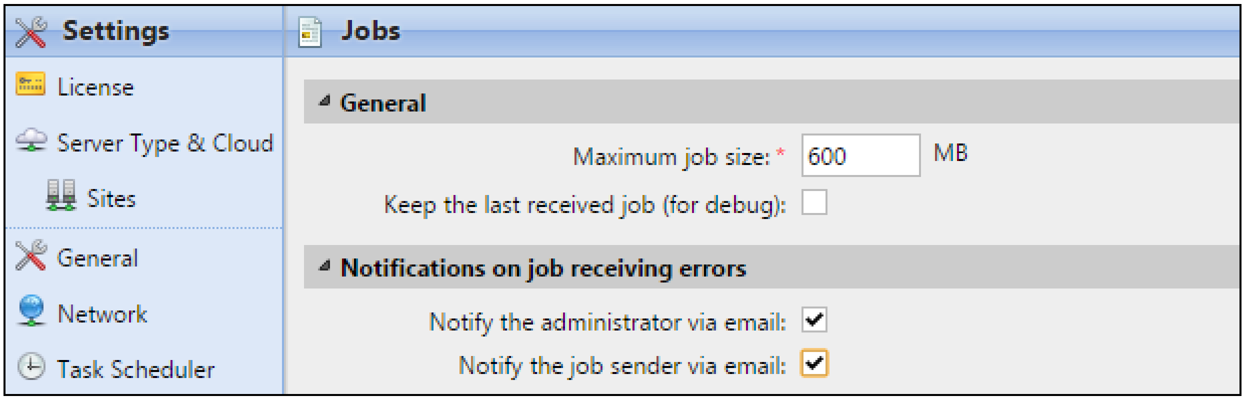


FIGURE 11.29. The **Notifications on jobs receiving errors**

On the **Jobs** settings tab, under **Notifications on jobs receiving errors**, you can select two options:

- **Notify the administrator via email**: The email message is sent to the administrator's email address set on the **General** settings tab, under **General**. For more information about the administrator email, see *"General"* on page 42.

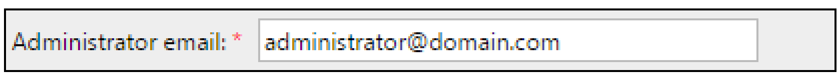


FIGURE 11.30. The **Administrator email** setting on the **General** settings tab

- **Notify the job sender via email**: the email message is sent to the primary email address set as **Email** on the user's properties panel on the **Users** settings tab. For more information about the email setting on the user properties panel, see *"Editing user accounts"* on page 120.

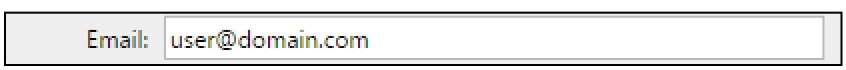


FIGURE 11.31. The **Email** setting on the user properties panel

16.7.2. To activate the notifications via pop-up window

The only condition for activation of the pop-up notification for a user is for MyQ Smart Job Manager to be installed and running on their computer.

For information on how to install and set up the MyQ Smart Job Manager, see the Guide to MyQ Smart Job Manager for Windows or macOS.

17. Processing Jobs via PJL Commands

On the **Job processing tab** of each queue, you can enforce additional job processing actions by selecting one or more of the predefined job settings or by creating any number of custom PJL commands.

When you select to enforce some of the predefined settings the original PJL sequences of the print job are replaced. If you enter your own PJL sequence, this sequence is added to the end of the PJL header of the original print job and overwrites all the original settings.

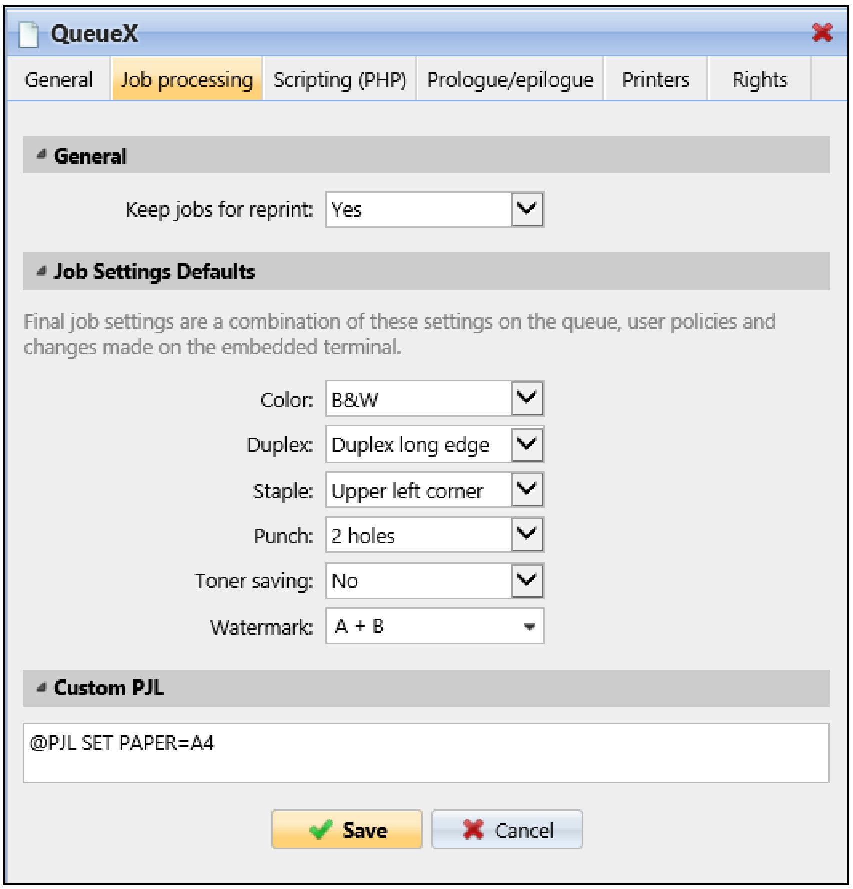


FIGURE 11.32. Job processing settings

The predefined commands enforce the following actions:

General section

- **Keep jobs for reprint**: *Yes, No*. Select *No* if you want to disallow reprinting of printed jobs (*Yes* by default)

Job Settings Defaults section. (all set to *Do not change* by default)

- **Color**: *Do not change, Color, B&W*
- **Duplex**: *Do not change, Simplex, Duplex long edge, Duplex short edge*
- **Staple**: *Do not change, No Staple. Upper left corner, Booklet, Lower left corner*
- **Punch**: *Do not change, No Punch, 2 holes, 3/4 holes*
- **Toner saving**: *Do not change, No, Yes*
- **Watermark**: Choose from your saved watermarks (empty by default)

Custom PJL section (empty by default)

The custom commands can enforce other actions or provide additional information to the MyQ server. For example, you can use **@PJL SET PAPER=A4** to enforce the A4 paper format or **@PJL COMMENT="USERDOMAIN:somedomain.com;"**to provide the MyQ server with the information about the domain of the printing user.

NOTICE: When you enter your own PJL sequence, it is necessary to enter the correct syntax. The command should always start with @PJL.

NOTICE: To be applied, the PJL command has to be supported by the printing device where the job is released. The information on what PJL commands are supported by a particular model of printing devices can be found in the documentation provided by the device manufacturer.

The final job settings are a combination of the above settings on a queue, user policies and changes made directly on the embedded terminal.

18. Scripting (PHP)

You can use PHP scripts to further process the job after it is received by the MyQ server. Together with the PJL options and customizable queues, the PHP scripting provides you with a large variety of job management options, such as the distribution of jobs between printing devices based on their size or color. Furthermore, you can employ PHP scripts to set up interaction with MyQ users via dialog boxes displayed in the MyQ Smart Job Manager on their computer.

The first section of this topic presents the classes, methods and properties that can be used in the scripts. The other two sections describe the additional job related actions *"Actions after processing"* on page 264) and the interaction with MyQ users (*"User interaction"* on page 267).

18.1. Classes, methods, and properties

There are five classes that can be used within the scripts: **Job**, **User**, **Queue**, **Session** and **QuotaInfo**. The object of the **Job** class represents the job sent to MyQ, the object of the **User** class represents the job's owner, and the object of the **QuotaInfo** class represents quotas of the job's owner. The **Queue** class can be used to move the job to one of the personal queues of the job's owner and methods of the **Session** class might be used for additional specific tasks, such as sending a log message to MyQ.

This section describes the methods and properties belonging to the classes.

Job class

The **Job** class has the following **methods** and **properties**:

Methods

Name	Description
this **pause**()	Pause the job
this **copyToQueue** (string $queueName)	Copy the job to queue $queueName. The new job is processed normally according the rules in the target queue
this **moveToQueue** (string $queueName)	Move the job to queue $queueName. The new job is processed normally according the rules in the target queue

Name	Description
this **setReleased**()	Set the job as released (printed) without actually releasing it. **setPrinted**() is still supported for BC
this **delete**()	Delete the job

Properties

Name	Type	Writable	Description
name	string	yes	Name of the job
dataSize	int	yes	Data size of the job in bytes
monoCount	int	yes	Count of the monochrome pages of the job
colorCount	int	yes	Count of the color pages of the job
pageCount	int	-	Total sum of the pages of the job

Name	Type	Writable	Description
paper	string	yes	Format of the paper with the following strings as its values: 'a4' 'a3' 'other' 'a5' 'b4' 'b5' 'folio' 'ledger' 'legal' 'letter' 'statement' This variable is employed by the 'set' method in MyQ. Use it in commands of the PHP script.
duplex	boolean	yes	Job is in duplex. Possible values: 'simplex' 'longEdge' 'shortEdge' Note: Changing this property only updates the metadata of the job. The job is not converted to simplex/duplex.
color	boolean	-	Job is in color. Note: Changing this property only updates the metadata of the job. The job is not converted to B&W/color.

Name	Type	Writable	Description
owner	User[ ]	yes	Owner of the job Note: The user policies are not updated; Projects are not updated.
copies	int	yes	Number of copies of the job Note: Changing this property only updates the metadata of the job. The number of copies to be released is not changed.
tonerSaving	boolean	yes	Toner Saving mode enabled
filename	string	yes	A path including the filename of the job. The path is relative to the job folder. Note: The path must exist, otherwise the job is not parsed and is declared as "deleted".
lang	int	-	The PDL of the job with the following integers as its values: UNKNOWN = 0, PDL_PCL = 1, PDL_PS = 2, PDL_ESCP = 3, PDL_PRESCRIBE = 4, PDL_PCLXL = 5, PDL_PDF = 6, PDL_JPEG = 7

User Class

The **User** class has the following **methods** and **properties**:

Methods

Name	Description
this **sendEmail**(string $subject, string $body)	Send an email to the user.
bool **canPrintToQueue**(string $queueName)	The user has the rights to send jobs to the queue.
bool **hasGroup**(string $name)	The user is a member of the group.
this **sendNotification**(string $type, string $title, string $body)	Send a notification to the user via MyQ SJM: type: info, warning, error title: notification title body: notification text (plain text format)
QuotaInfo **getQuotaInfo**()	Get information about user's quotas.

Properties

Name	Type	Writable	Description
name	string	-	Login name of the user
email	string	-	Email of the user
fullname	string	-	Name and surname of the user
delegates	User[ ]	-	Array of the user's delegates
notes	string	-	Notes
personalQueues	Queue[ ]	-	Array of personal queues ordered by priority

Queue Class

The **Queue** class has the following **methods** and **properties**:

Methods

Name	Description
bool **isAnyPrinterAvailable** ()	There is at least one printing device available to the queue.

Properties

Name	Type	Writable	Description
name	string	-	Name of the queue

Session

The session object is accessible via the **MyQ()** global function. The **Session** class has the following **methods**:

Methods

Name	**Description**
User **getUserByUserName** (string $userName)	Find a MyQ user by their user name. If no user is found, null is returned.
this **logError**(string $message)	Create an error message in the MyQ log.
this **logWarning**(string $message)	Create a warning message in the MyQ log.
this **logInfo**(string $message)	Create an info message in the MyQ log.
this **logNotice**(string $message)	Create a notice message in the MyQ log.

Name	Description
this **logDebug**(string $message)	Create a debug message in the MyQ log.
string **getJobsPath**()	Get the path to the folder on the MyQ server where the print job is stored. Ends with a backslash.

QuotaInfo Class

The **QuotaInfo** class has the following **methods**:

Methods

Name	Description
bool **canColor**()	Check if the user can print or copy in color.
bool **canPrint**()	Check if the user can print.
bool **canCopy**()	Check if the user can copy.
bool **canScan**()	Check if the user can scan.

INFO: This class contains information about the user's current state of quotas.

18.2. Actions after processing

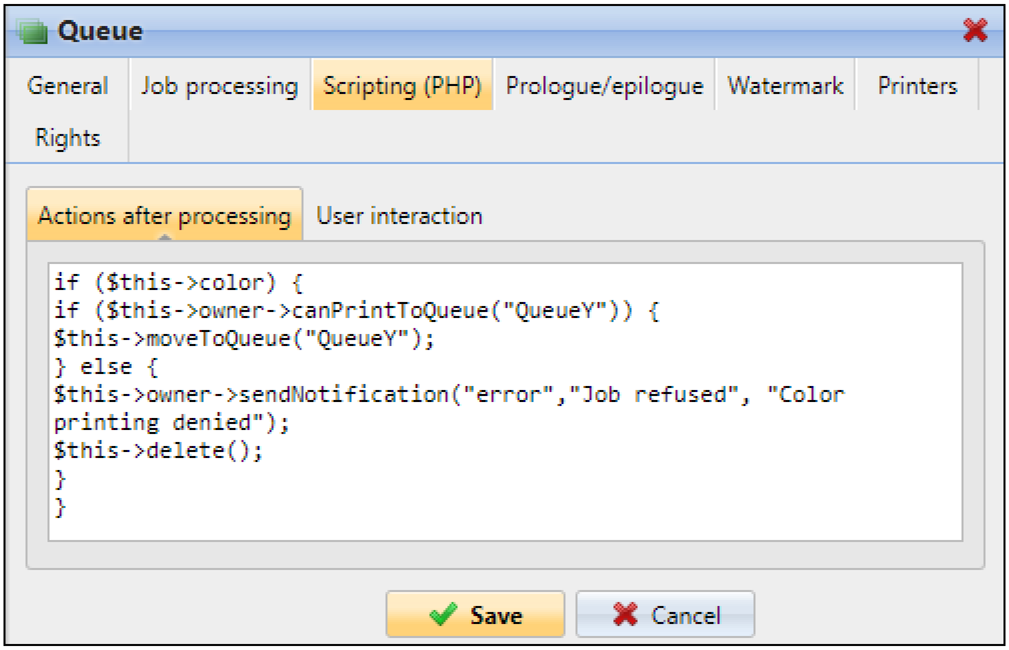


FIGURE 11.33. The Scripting (PHP) tab of a queue with an example of the PHP script

This section presents the options of processing the job received by the MyQ server. To set up the processing via the PHP script, go to the properties panel of the queue where you want to use it, open the **Actions after processing** tab and enter the script there.

In the scripts, you can use all basic PHP functions and all of the classes, methods and properties from section *"Classes, methods, and properties"* on page 257.

INFO: The PHP script runs immediately after the print job is parsed and before the job is marked as ready.

INFO: The properties of the print job can be obtained via the MyQ Job parser, the MyQ Smart Print Services or the job's PJL header.

18.2.1. Examples of use of the PHP scripts

In this section you can find examples covering a variety of job managemet options. These examples should give you an idea about how to use the PHP scripting in MyQ. You can also substitute the properties and methods in the examples to use them as building blocks of more complex scripts.

Actions based on the number of pages

Move jobs with a higher number of color pages to a monochrome queue.

- if ($this->colorCount>20) {$this->moveToQueue("ForceMonochrome");}

Delete jobs with a large number of pages.

- if ($this->pageCount>500) {$this->delete();}

Actions based on the size of the job

Move large jobs to a dedicated queue.

- if ($this->dataSize>1000000) {$this->moveToQueue("LargeJobs");}

Delete oversize jobs.

- if ($this->dataSize>5000000) {$this->delete();}

Actions based on paper format

Move jobs with the a3 paper format to a dedicate queue.

- if ($this->paper===6) {$this->moveToQueue("LargePaperFormat");}

Actions based on the job owner

Move jobs of a certain owner to a dedicated queue.

- if ($this->owner->name==="eliot.kate") {$this->moveToQueue("EliotKate");}

Change the owner of the job.

- if ($this->owner->name==="eliot.kate") {$this->owner=MyQ()->getUserByUserName("simon.kate");}

Actions based on the duplex property

Move duplex jobs to a duplex queue.

- if ($this->duplex) {$this->moveToQueue("Duplex");}

Move simplex jobs to a simplex queue.

- if ($this->duplex===false) {$this->moveToQueue("Simplex");}

Actions based on the color property

Move color jobs to a color queue.

- if ($this->color) {$this->moveToQueue("Color");}

Actions based on the job name or the source application

Move jobs printed in MS Word to a dedicated queue.

- if (strpos($this->name,"Microsoft Word")!==false) {$this->moveToQueue("MSWord");}

Delete jobs sent from Facebook.

- if (strpos($this->name,'Facebook')!==false) {$this->delete();}

Actions based on the rights to a queue

Move jobs of users who are not alowed to print to one queue to a different queue

- if ($this->owner->canPrintToQueue(Color)===false) {$this->moveToQueue(Monochrome);}

Actions based on group membership

Move jobs sent by members of a group to a dedicated queue

- if ($this->owner->hasGroup(Clerks)){$this->moveToQueue(Clerks);}

Actions based on the PDL of the job

Move all jobs sent in a certain PDL to a dedicated queue

- if ($this->lang===0){$this->moveToQueue(UnknownPDL);}

Sending custom log messages to MyQ

Send a log info message to MyQ Log

- MyQ()->logInfo("This message appears in the MyQ log.");

Complex actions

If number of pages multiplied by number of copies exceed a certain number, delete the job and inform the user

- // get the number of pages and the number of copies
  $pages_number = $this->pageCount; $copies_number = $this->copies;
  // if total (pages*copies) exceeds 500, delete the job and notify its owner
  if ($pages_number* $copies_number>500)
  {$this->delete(); $this->owner->sendNotification("error","Job refused", "Cannot print jobs exceeding 500 pages.");
  }

Send color jobs to a dedicated queue; if the job owner does not have rights to this queue, delete the job and inform the user

- // if the job is color, perform the next action
  if ($this->color) {
  // if the owner has rights to the queue, move the job to the Color queue
  if ($this->owner->canPrintToQueue("Color")) {
  $this->moveToQueue("Color"); }
  // if they don't have rights to the queue, delete the job and inform the user
  else {
  $this->owner->sendNotification("error","Job refused", "Color printing denied");
  $this->delete(); }}

18.3. User interaction

You can set up this feature to provide users with elementary interaction options via the MyQ Smart Job Manager. A dialog box informs the user about a certain situation and lets them select from the following options: YES/NO, PRINT/NO, YES/NO/CANCEL. After the choice is made, the job is either printed, canceled, or processed based on the Yes/No selection.

In the scripts, you can use all basic PHP functions and almost all of the classes, methods and properties from the section *"Classes, methods, and properties"* on page 257. The only two methods **not supported** by the feature are **$this->job->setPrinted()** and **$this->job->pause()**. Apart from the common classes, methods and properties, you can use several additional functions to communicate with the MyQ Smart Job Manager application.

The User interaction script runs in the context of the UserScript class. The sent job can be accessed as **$this->job**. Objects from all classes except the Session class can be accessed via the job object, for example the owner **$this->job->owner**. Objects from the Session class can be accessed via the **MyQ ()** global feature, for example **MyQ()->logInfo("This message appears in the MyQ log.");**.

INFO: The properties of the print job can be obtained via the MyQ Job parser, the MyQ Smart Print Services or the job's PJL header.

18.3.1. How does the user interaction work?

1. After a user sends a job to be printed, the main function is called to decide which dialog boxes should be shown.
2. The dialog boxes are shown to the user (one after another) and in each of them, the user reads the message and selects the interaction option (Yes, No, Print, Cancel).
3. Responses are sent back to the MyQ server.
4. If another user interaction is returned to SJM, the procedure returns to step 2.
5. When no more interactions are needed and if the job was not canceled, it is sent to MyQ.

18.3.2. Functions for communication with the Smart Job Manager

The following functions can be used for the communication with the Smart Job Manager application, the first three determine which dialog box will be created and the last one will terminate the script processing:

Name	Description
$this->dialogYesNo($text)	Creates a dialog box with $text as text content and Yes, No buttons.
$this->dialogPrintNo($text)	Creates a dialog with $text as text content and Print, No buttons.
$this->dialogYesNoCancel ($text)	Creates a dialog with $text as text content and Yes, No and Cancel buttons.
$this->terminate()	Terminates the script processing.

18.3.3. How to write the script?

First, you need to define the **main()**. function. This function decides if the dialog box should be opened (under which conditions) and which dialog box should be shown.

Then you can define on click functions with reactions to the selected option: **onYes()**, **onNo()**, **onPrint()**, **onCancel()**

> **NOTICE:** Public properties are kept between calls. In fact, they are sent to the client and back.

Example of the user interaction script

```
function main(){
// If the job is color, show a Yes/No dialog box to ask the user if they want to print the job in B&W.
if ($this->job->color){
$this->dialogYesNo("Jobs sent to this queue are printed in B&W,
do you still want to send the job here?"); }
}
function onYes(){
// The user is informed that the job was sent to the B&W queue via a SJM notification.
$this->job->owner->sendNotification("info","Job sucessfully sent","Your job was sent to the B&W queue.");
}
function onNo(){
//The job is deleted and the user is informed about it via a SJM notification.
$this->job->delete(); $this->job->owner->sendNotification("info","Job deleted","Your job was deleted.");
}
```

19. Prologue, Epilogue

Some brands of printing devices support the Prescribe PDL (page description language), which can be used to set up special rules for additional modification of printed output. For example, you can use Prescribe to add a custom header or footer to selected pages of a document or to the whole document.

In MyQ, these rules are part of the options available on properties panels of print queues. For each queue, you can create custom rules by importing a text file with a set of Prescribe commands and selecting in which part of printed document the commands should be applied.

INFO: Multiple rules can be defined for each queue.

19.1. Adding, editing and deleting rules

The rules can be added and edited on the **Prologue/epilogue** tab, in **MyQ, Queues**. Once you are on the **Queues** main tab, right-click on the queue where you want to set up the rules and click **Edit** (or select the queue, click **Actions** on the bar at the top of the tab, and then click **Edit**, or double-click on the queue).

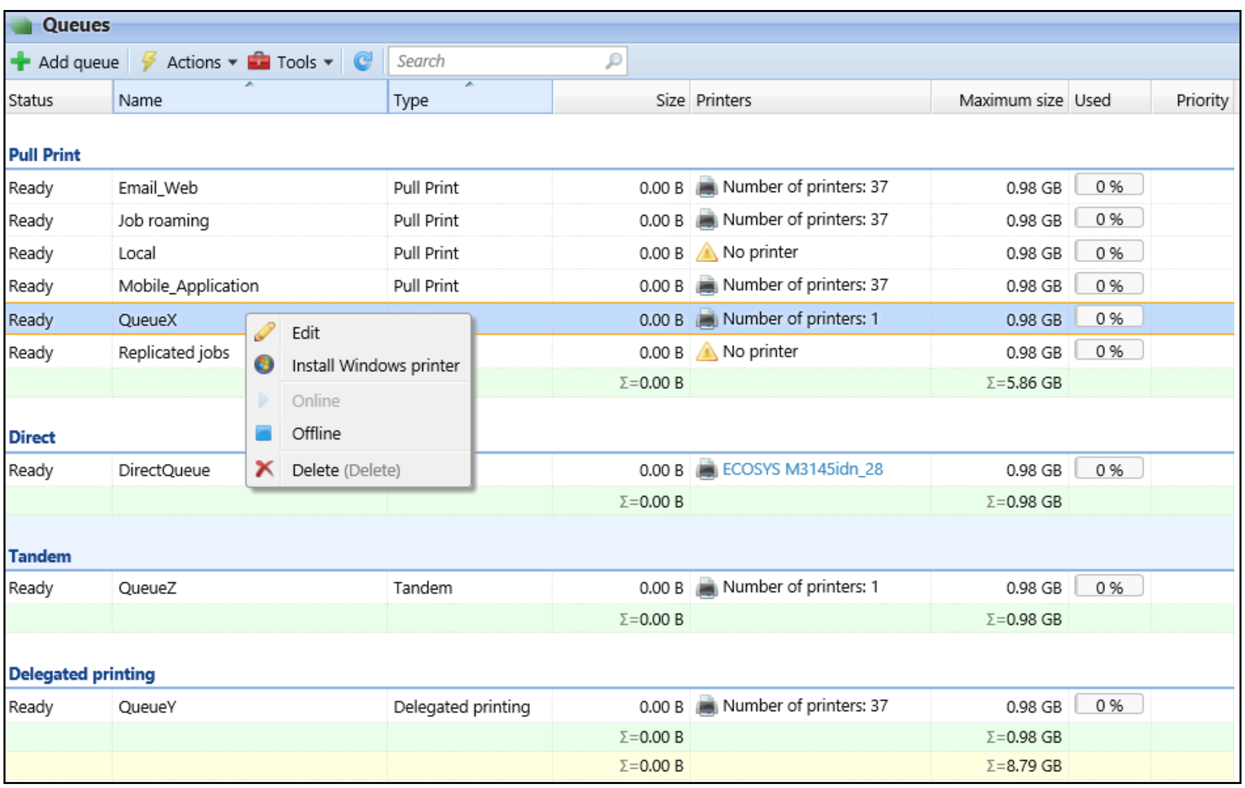
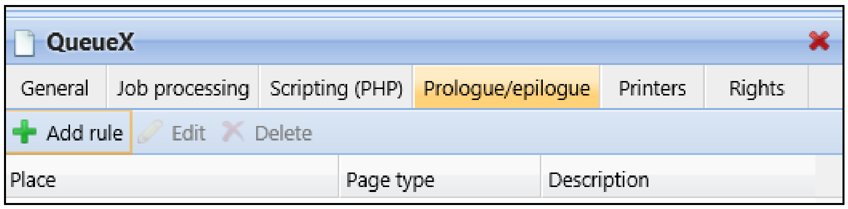


FIGURE 11.34. Opening the properties panel of QueueX

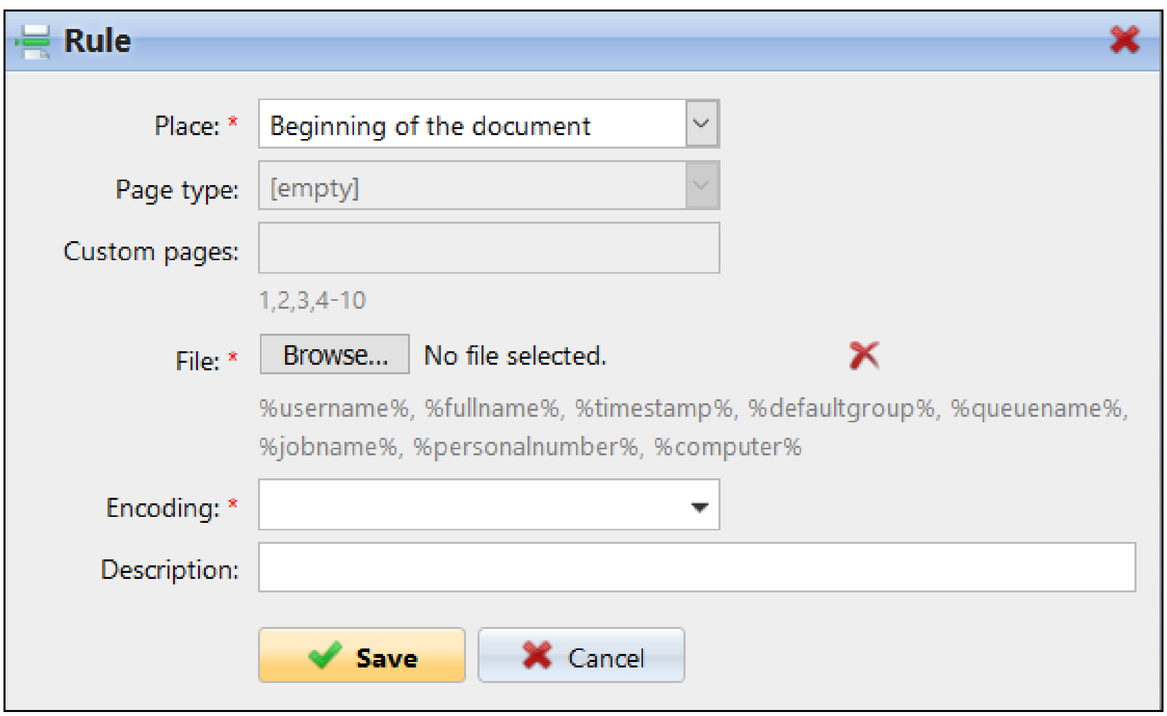
19.1.1. Adding rules to a queue

To add a rule to a queue, do the following:

1. Open the queue's properties panel.
2. On the panel, click **Prologue/epilogue**. The **Prologue/epilogue** tab opens.
3. On the tab, click **+Add rule**. A panel with settings of the new rule open at the bottom of the panel.



4. Set up the rule (for information on the settings, see *"Table of settings "* on the facing page.), and then click **Save**. The new rule is added to the list of rules on the **Prologue/epilogue** tab.



19.1.2. Editing a rule

To open the settings of a rule, double-click the rule on the **Prologue/epilogue** tab. Settings of the new rule open at the bottom of the panel.

Table of settings

Place	The object defined by the Prescribe code can be placed to the beginning of the document, end of the document, beginning of selected pages or end of selected pages.
Page type	Here you can select to which pages the Prescribe code will apply: All pages, Odd pages, Even pages or Custom pages.
Custom Pages	Here you can further specify to which pages the Prescribe code will apply.
File	Here you can upload the text file with the Prescribe code.
Encoding	Here you have to select the encoding that is used in the text file with the Prescribe code.
Description	Here you can type a description of the rule. You will see this description on the rules overview.

19.1.3. Deleting a rule

To delete a rule from a queue, do the following:

1. Open the queue's properties panel.
2. On the panel, click **Prologue/epilogue**. The **Prologue/epilogue** tab opens.
3. On the tab, select the rule, click **Delete**, and then confirm the action in the confirmation dialog box. The rule is removed from the panel.

20. Jobs Preview

With MyQ's default software, MAKO, or a third-party job preview software installed on the MyQ server, you can enable MyQ users and the MyQ administrator to preview print jobs that are sent to MyQ in one of the three most common page description languages: PCL 5, PCL 6 and PostScript. After the feature is set up, both users and the administrator can open the job preview on the **Jobs** main tab in the MyQ Web Interface.

20.1. Setting up the Jobs Preview feature

To set up the feature, go to **MyQ, Settings, Jobs**.

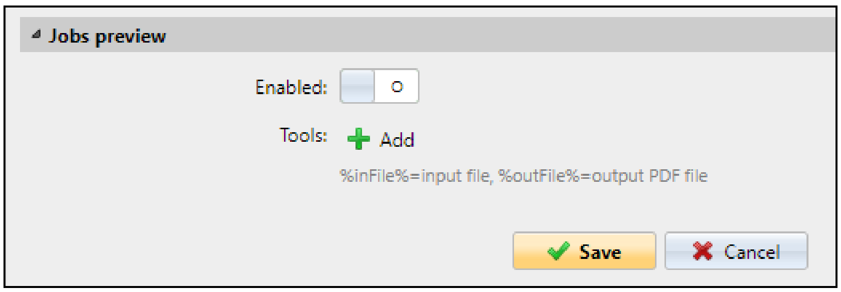


FIGURE 11.35. Jobs preview settings

In the **Jobs preview** section you can enable or disable the preview and click **+Add** next to *Tools* to set it up.

Select one or more output types from *PCL 5, PCL 6* and/or *PostScript*, and choose the actual *Tools* to be used for the preview. The options are:

- **Default**: MyQ's internal engine, *MAKO*
- **External**: A third-party engine of your choosing. If selected, it is necessary to type the command and parameters to be used for the preview, and it's optional to choose between **Removing Prescribe** or not if the external software does not support Prescribe orders.

The following examples show you what the command line can look like:

PostScript (GhostScript: tested for 921): "C:\Program Files\Ghostscript\gswin64c" -q -dNOPAUSE -dBATCH -sDEVICE=pdfwrite -sOutputFile="%outFile%" "%inFile%"

PCL (GhostPCL): "C:\Program Files\GhostPCL\gpcl6win64" - dNOPAUSE -sDEVICE=pdfwrite -sOutputFile="%outFile%" "%inFile%"

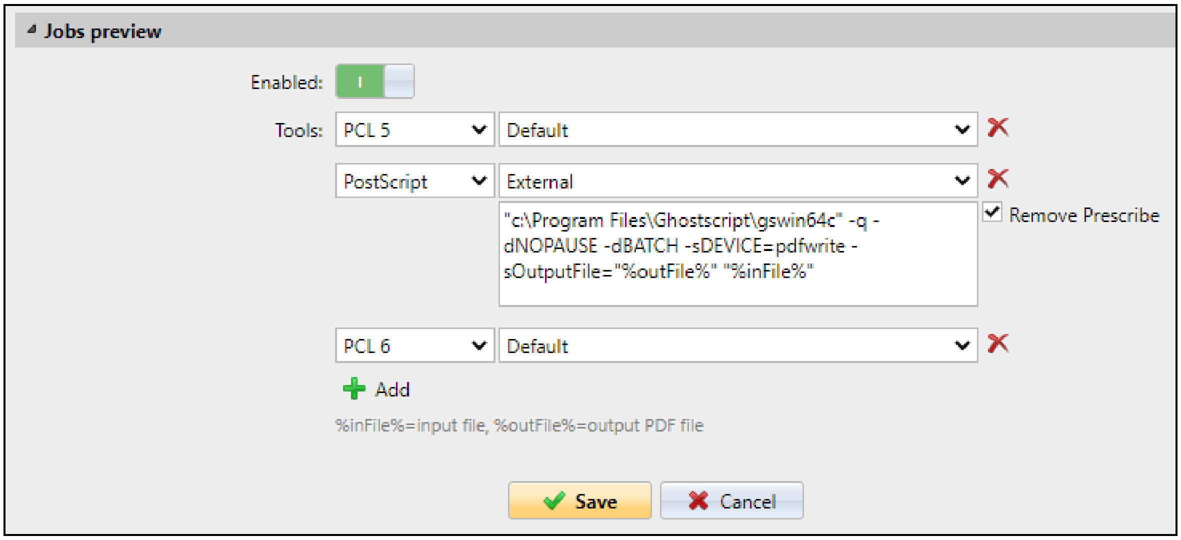


FIGURE 11.36. Jobs preview settings example

INFO: For detailed information on how to use the commands, see the external software's documentation.

To enable (or disable) the Jobs preview feature, do the following:

Click the **ON/OFF** button next to **Enabled**.

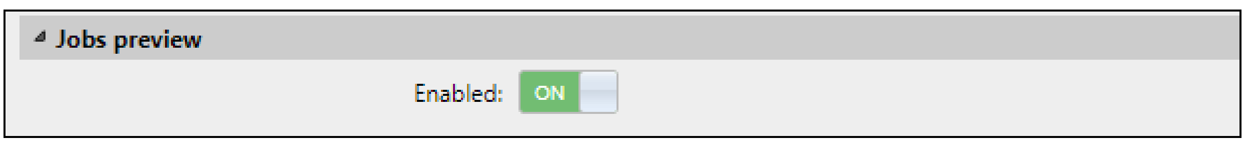


FIGURE 11.37. The ON/OFF button for enabling and disabling the feature

To set the tool for a particular print job output type, do the following:

1. Under **Jobs preview**, click **+Add**. The settings of the new tool appear on the tab.

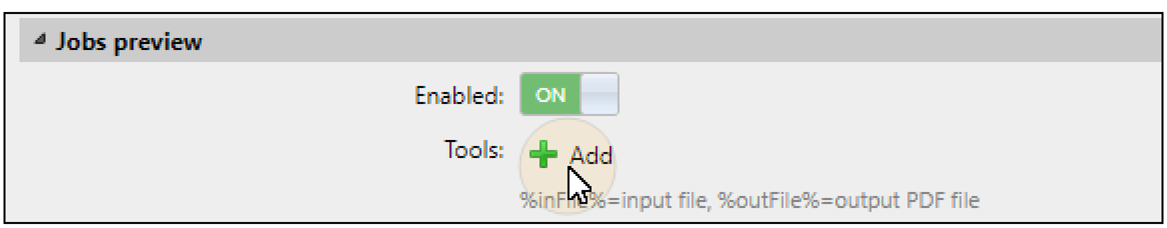


FIGURE 11.38. Adding the new tool for job preview

2. On the tools drop-down box on the left, select the page description language, in the text box on the right, enter the path to the external application to be used for this language and set the parameters of the preview using internal commands of the application. After this, click **Save** at the bottom of the tab.

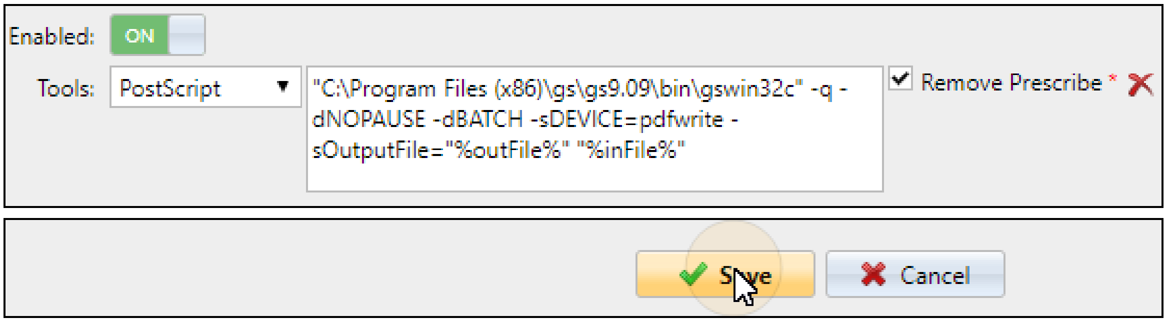


FIGURE 11.39. Setting and saving the new tool

NOTICE: The **Remove Prescribe** option can be used in case the external software does not support Prescribe orders. For information about the Prescribe orders, see *"Prologue, Epilogue"* on page 270.

20.2. Previewing the print jobs

The jobs can be previewed on the **Jobs** main tab in the MyQ Web Interface. To open the tab, click **MyQ**, and then click **Jobs**.

To preview the print job, select the job on the tab and click **Preview** at the left side of the toolbar. (Or right-click the job, and then click **Preview** on the shortcut menu.)

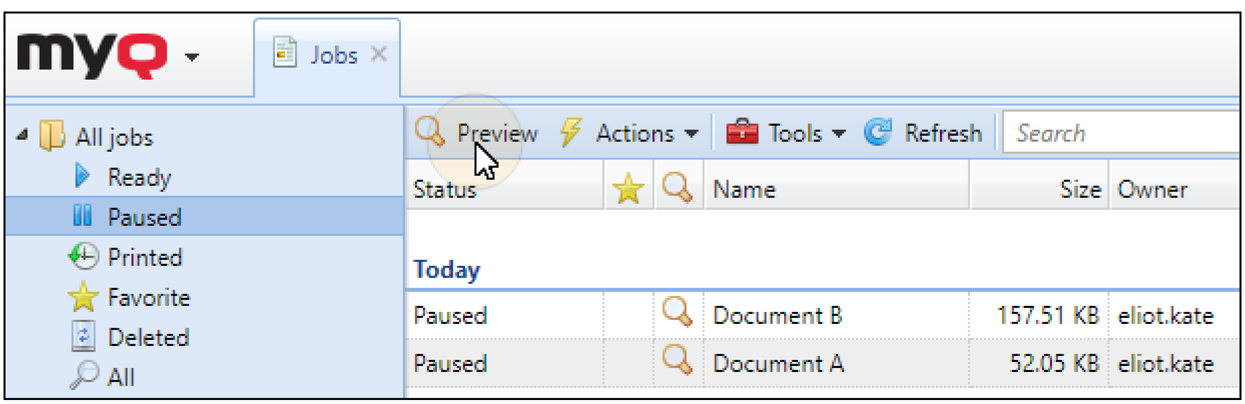


FIGURE 11.40. Previewing a job

INFO: To open the preview, you might need to allow pop-up windows in your Web browser.

21. Job Archiving

With a dedicated Job Archiving license and the Job Preview feature set up on the MyQ server, you can automatically archive all print jobs that are sent to MyQ. On selected brands of printing devices, you can also archive all copy and scan jobs.

This way you can have full control over what has been printed, scanned and copied within your printing environment, which can be required for example in high security areas in order to be able to identify sources of data leaks.

INFO: For information on how to acquire the Job Archiving license, please contact the MyQ Sales department. For information on how to set up and activate the Job Preview, see *"Jobs Preview"* on page 273.

21.1. Setting up the Job Archiving feature

The feature is not part of the default setup of the MyQ server and before the Job Archiving license is added to the server, the settings of the feature on the MyQ Web Interface are hidden from the administrator. After you add the licenses, you can set up the feature on the Jobs settings tab of the MyQ Web Interface.

Adding and activating the license

1. Open the **License** settings tab of the MyQ Web Interface
   a. Click **MyQ** - **Settings** - **License**.

2. On the toolbar at the top of the **License** section, click **+Enter license**. The **Enter license** dialog box appears.

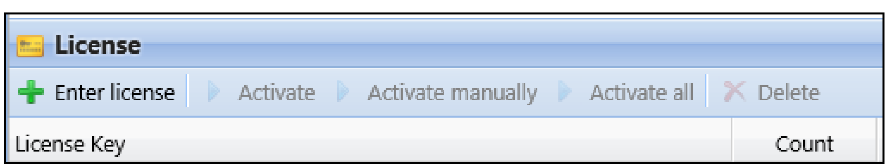


FIGURE 11.41. Adding the license on the **License** section of the **License** settings tab

3. In the dialog box, enter the license, and then click **OK**. The license is added to the server and displayed in the list of licenses on the **License** section.

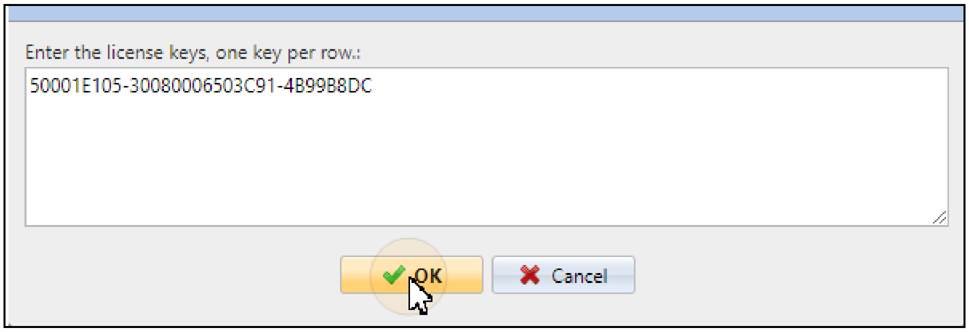


FIGURE 11.42. Adding the Job Archiving license key

4. To activate the license, select it on the list, and then click **Activate**.

Setting up the feature

On the **Jobs** settings tab of the MyQ Web Interface (to open, click **MyQ**, then click **Settings**, and lastly click **Jobs**), under **Jobs archiving**, you can enable or disable the feature and change the folder where the jobs are archived (by default it is the JobsArchive subfolder of the MyQ data folder).

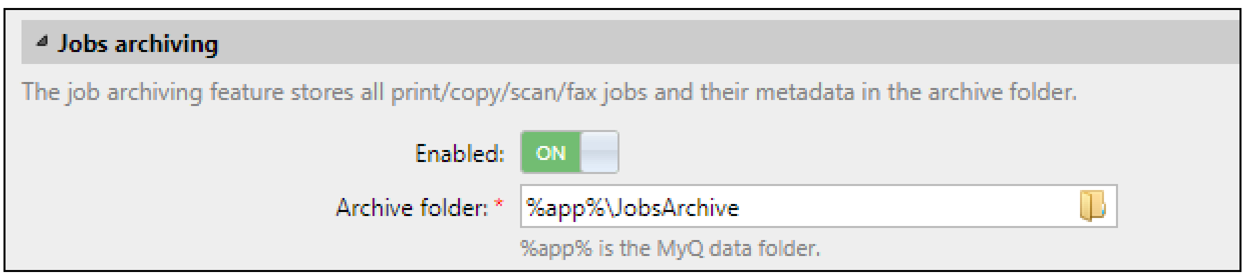


FIGURE 11.43. Enabling Job archiving

21.2. Viewing the archived jobs

The jobs are stored in subfolders of the **Archive folder**, each of these sub-folders has the form: **YYYY-MM-DD-XXXX** where the front part informs about the date when the sub-folder was created, while the number at the bottom part serves to sort sub-folders created in the same day.

In the subfolders, you can find two files for each of the printed, copied or scanned jobs: a PDF file with the view of the job and an XML file with basic information about the job, such as the type of the job or the username of the printing user.

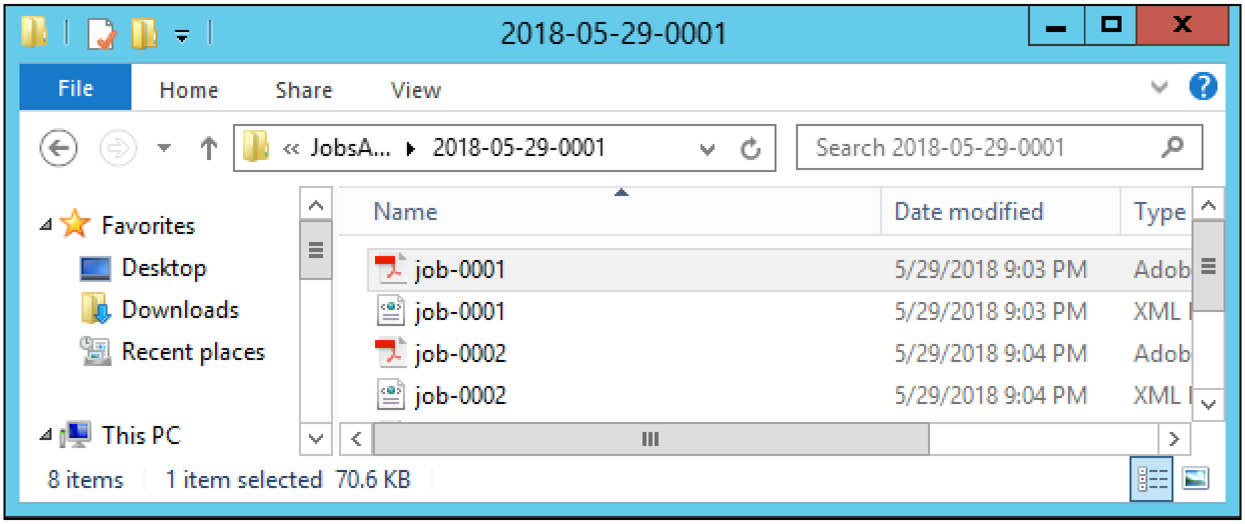


FIGURE 11.44. The folder with the archived jobs

```
  <?xml version="1.0" encoding="UTF-8"?>
- <data>
     <timestamp>2018-05-29 21:03:39</timestamp>
     <username>eliot.kate</username>
     <jobType>copy</jobType>
     <serverName>10.14.5.96</serverName>
     <serverVersion>7.1.0.366</serverVersion>
     <printerAddr>10.14.4.12</printerAddr>
   - <files>
        <file>job-0001.pdf</file>
     </files>
  </data>
```

FIGURE 11.45. The job's data shown in the XML file

22. Price List

On the **Price List** settings tab, you can create price lists and attach them to configuration profiles. Price lists are used to assess the price of each printing device operation. That is necessary for monetary accounting and MyQ advanced features such as credit accounting and monetary quotas.

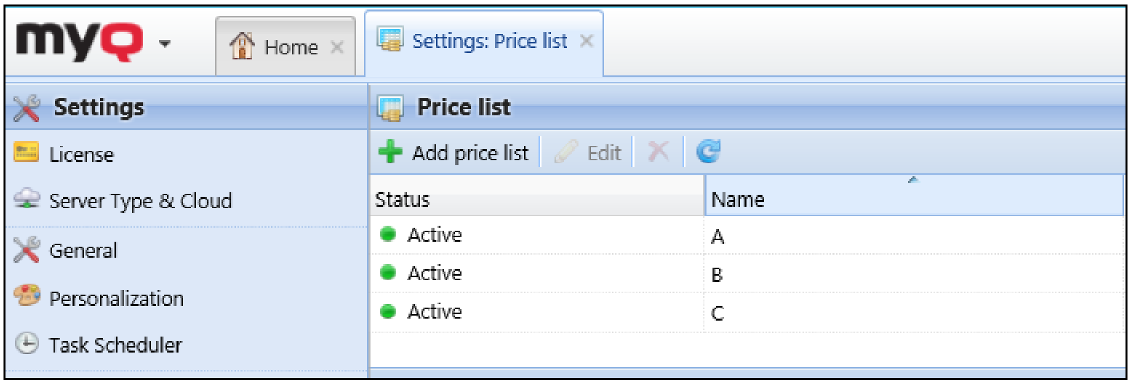


FIGURE 12.1. The Price List settings tab

You can also set discounts or increase price of print, copy, scan and fax services for particular users and groups.

To open the **Price list** settings tab, go to **MyQ, Settings, Price list**.

22.1. Adding price lists

To add a new price list:

1. On the bar at the top of the **Price List** settings tab, click **+Add price list**. The new price list properties panel opens on the right side of screen.
2. On the panel, enter the price list name.
3. Set up the price list (see *"Editing price lists"* below).
4. Click **Save**.

22.2. Editing price lists

On the properties panel of the price list, you can rename the price list, define prices of print, copy, scan and fax services and attach the price list to printing devices. To open the panel, double-click the price list on the list of price lists on the **Price List** setting tab.

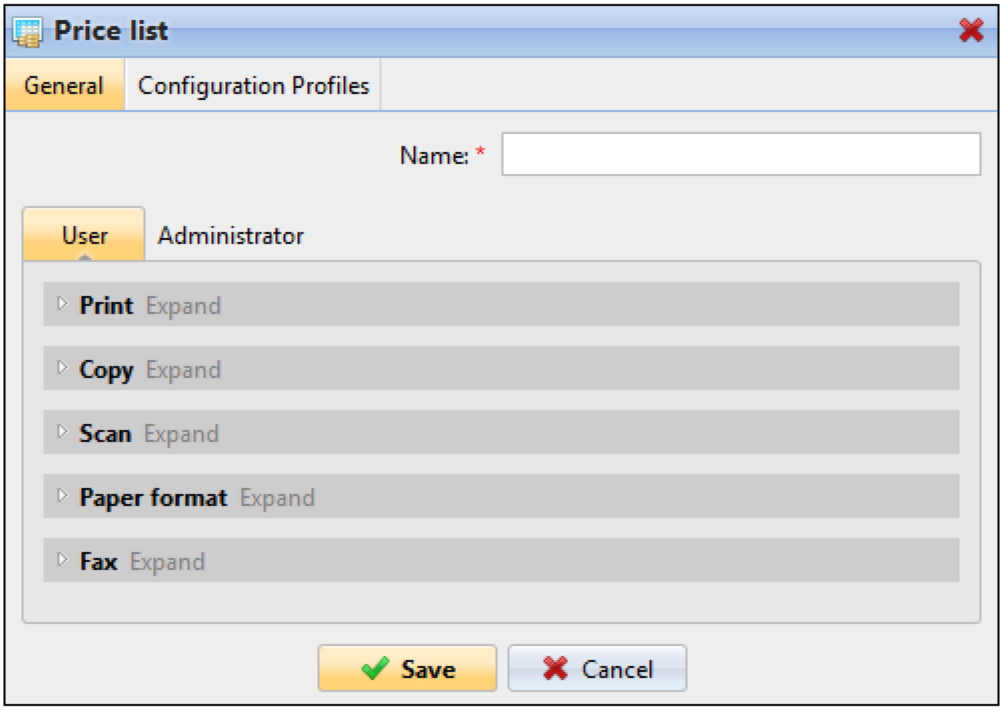


FIGURE 12.2. Price list properties panel

22.2.1. Setting prices of print, copy, scan and fax services

On the **General** tab of the price list's properties panel, you can set prices of print, copy, scan and fax services. There are two subtabs, the **Users** subtab, where you set prices for MyQ users, and the **Administrator** tab, where you set prices for the MyQ administrator.

Print	In this section, you can set the price per printed page for monochrome and full-color print. Some printing devices allow pricing according to coverage of paper. You can set prices for three states of coverage: **Low**, **Medium** and **High**.
Copy	In this section, you can set the price per copied page for monochrome, full-color and single color copying. Some printing devices allow pricing by coverage of paper. You can set prices for three states of coverage: **Low**, **Medium** and **High**.
Scan	In this section, you can set the price per scanned page.

Paper format	In this section, you can set the price per sheet for different paper formats.
Fax	In this section, you can set the price per printed faxed page.

INFO: Some printing devices lack the counters necessary for obtaining information about some parameters, for example information about size of paper. Those parameters are not counted in the final price of jobs that are carried out on these machines.

INFO: Whenever the price list is updated, e.g. its parameters values are changed and the price list is saved, a new price list is created. Pages printed with the previous version of the price list are counted according to the old settings.

22.2.2. Attaching price lists to printing devices on the properties panel

1. On the list of price lists on the **Price List** settings tab, double-click the price list. The new price list properties panel opens on the right side of the window.

2. Click **Configuration Profiles**.

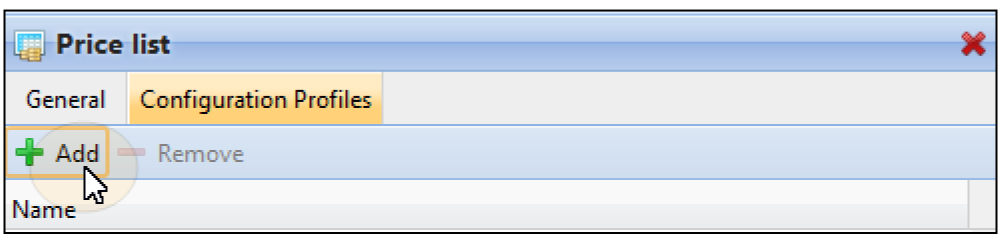


FIGURE 12.3. Adding printing devices to the price list on the **Printers** section of the price list properties panel

3. Click **+Add**. The **Select Configuration Profile** window opens.

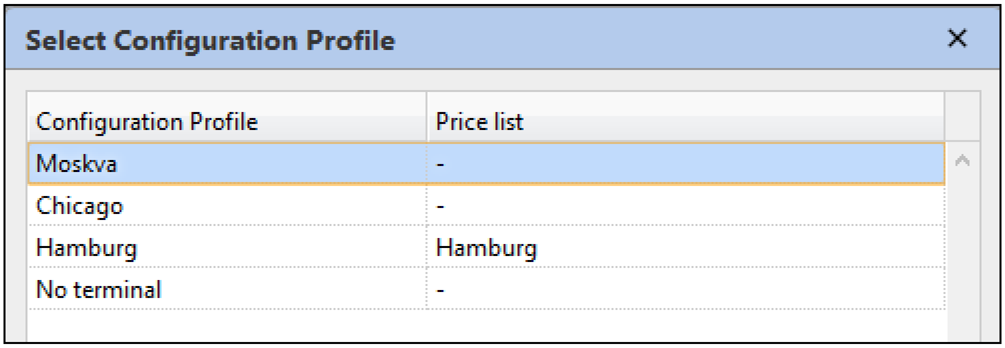


FIGURE 12.4. Selecting the configuration profile

4. In the dialog box, select the configuration profile to which you want to attach the price list.

5. Click **OK**. The configuration profile appears on the printing devices list on the **Printers** tab.

You can also attach a price list to a configuration profile when you go to **Settings - Configuration Profiles**, in the overview double-click a profile and change the Price List in the right pane on the window.

> **NOTICE:** You cannot attach more than one price list to a single configuration profile. If you add a price list to a configuration profile that already has a different price list attached to it, the old price list is replaced by the new one.

22.3. Discounts and increased prices of print, copy, scan and fax services

The prices set in price lists are applied to all users and groups without any possible distinction. To distinguish between particular users and groups, you can provide the users and groups with discounts, or increase the prices in the list for them.

The discounts are set in percents and are applied to all price lists. Within the discount, you can set a particular value for each print, copy, scan or fax price lists' item. The price of an action is increased by setting a negative discount for the item, for example a -15% discount.

The **Discounts** section, where the discounts are set, is also part of the **Price List** settings tab.

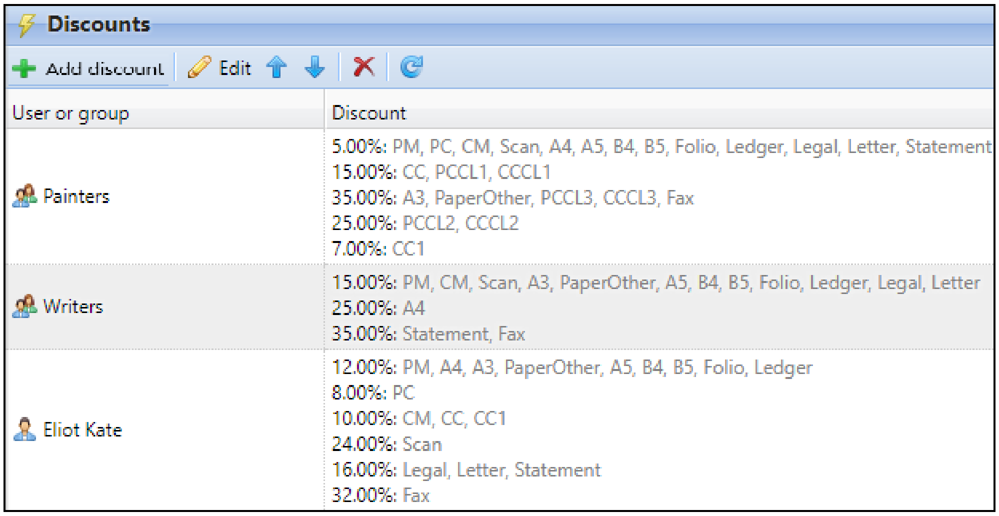


FIGURE 12.5. The **Discounts** section of the **Price list** settings tab

INFO: If more discount definitions apply to a user, the one defined higher in the list is used. Use the up and down arrows to adjust the order.

Creating a new discount

1. Click **+Add discount** at the upper-left corner of the **Discounts** widget. The new discount properties panel appears on the right side of screen.

2. Set the discount.

3. Click **OK** to save it.

Editing a discount

To open editing options of a discount, double-click the discount (or right-click the discount, and then click **Edit** on the shortcut menu). The discount's properties panel appears on the right side of screen.

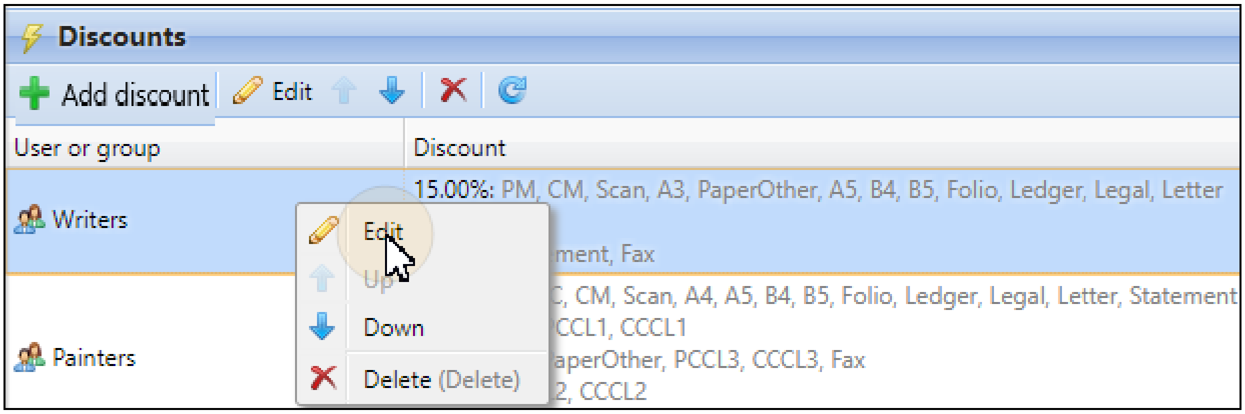


FIGURE 12.6. Opening a discount

For each discount, you need to set the user or group to which it will be applied and the values of each item (such as B&W print or Full-color copy) of the discount in percents. ***To increase the price of an item, set the discount to a negative number (such as -15%).***

After the discount is set, click **OK** to save it.

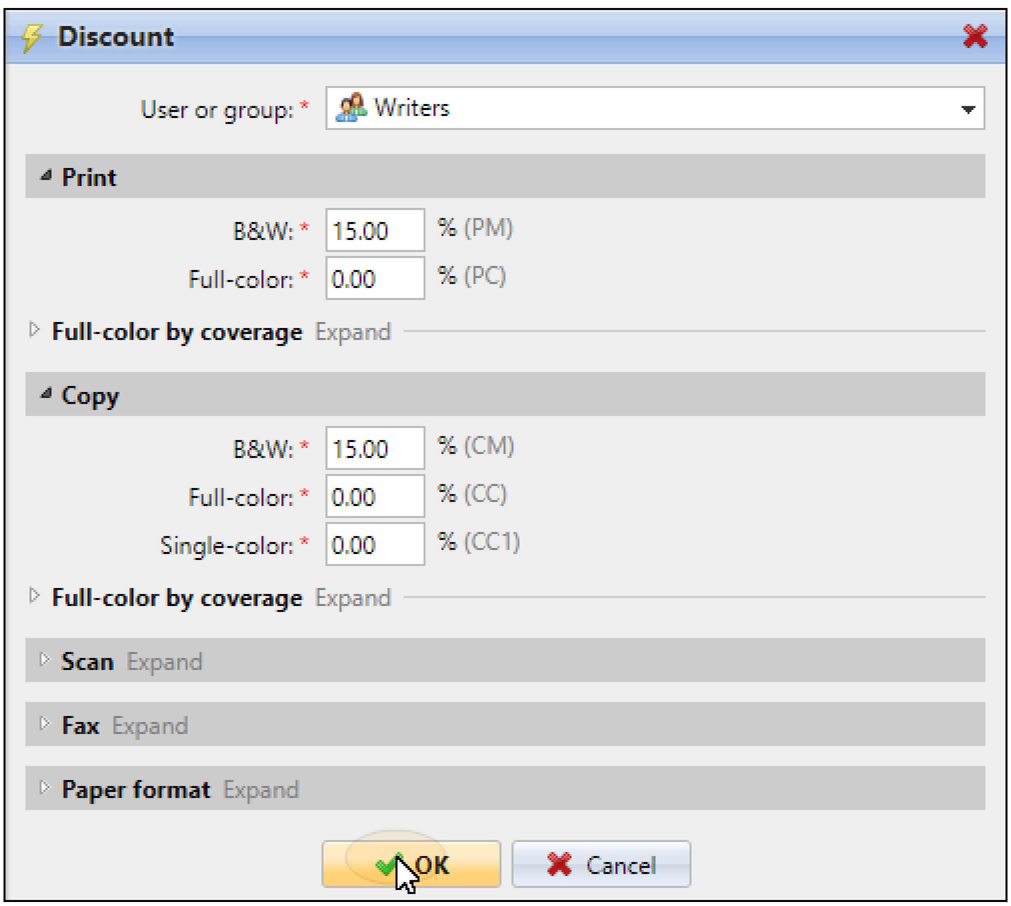


FIGURE 12.7. Editing a discount

Deleting a discount

1. Select the account.
2. Click .

23. Reports

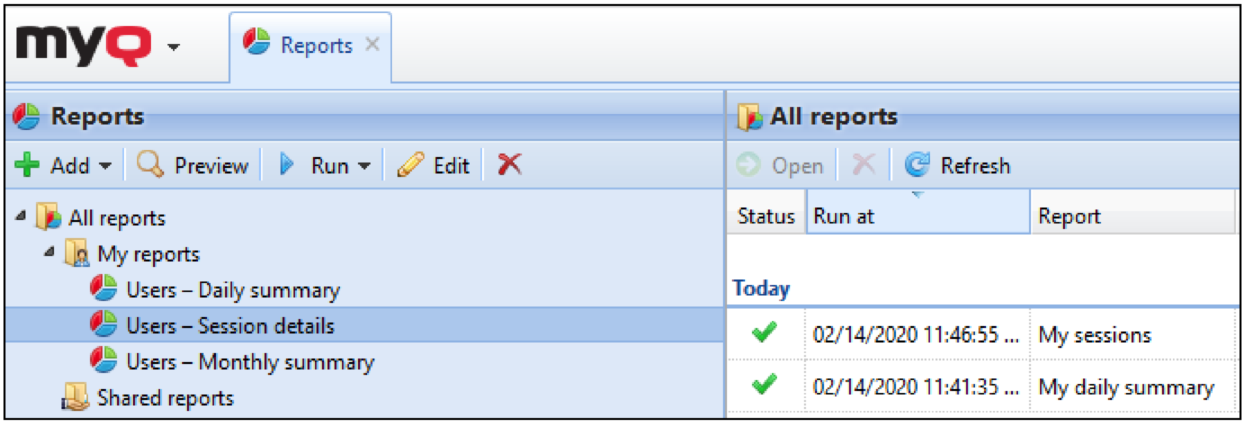


FIGURE 12.8. **Reports** main tab

In the MyQ web interface, on the **Reports** main tab (**MyQ, Reports**), you can create and generate reports with a variety of data concerning your printing environment. The reports can be related to users, printing devices, print jobs, etc. Reports in MyQ are divided into two main categories: **My Reports** and **Shared reports**. **My Reports** show users reports created by themselves, while **Shared reports** show them reports created by the administrator or by other users.

There are three default reports: **My daily summary**, **My sessions** and **My monthly summary**. These are displayed in the **My Reports** folder of the MyQ administrator, who can modify them, delete them or change their design. For all the other users, the default reports are displayed in the **Shared Reports** folder and cannot be changed in any way.

In addition to the three default reports, the administrator can create an unlimited number of reports and sort them into sub-folders of the **My Reports** folder. Users can create their own reports but they are limited to use only certain report types depending on the rights granted by the administrator.

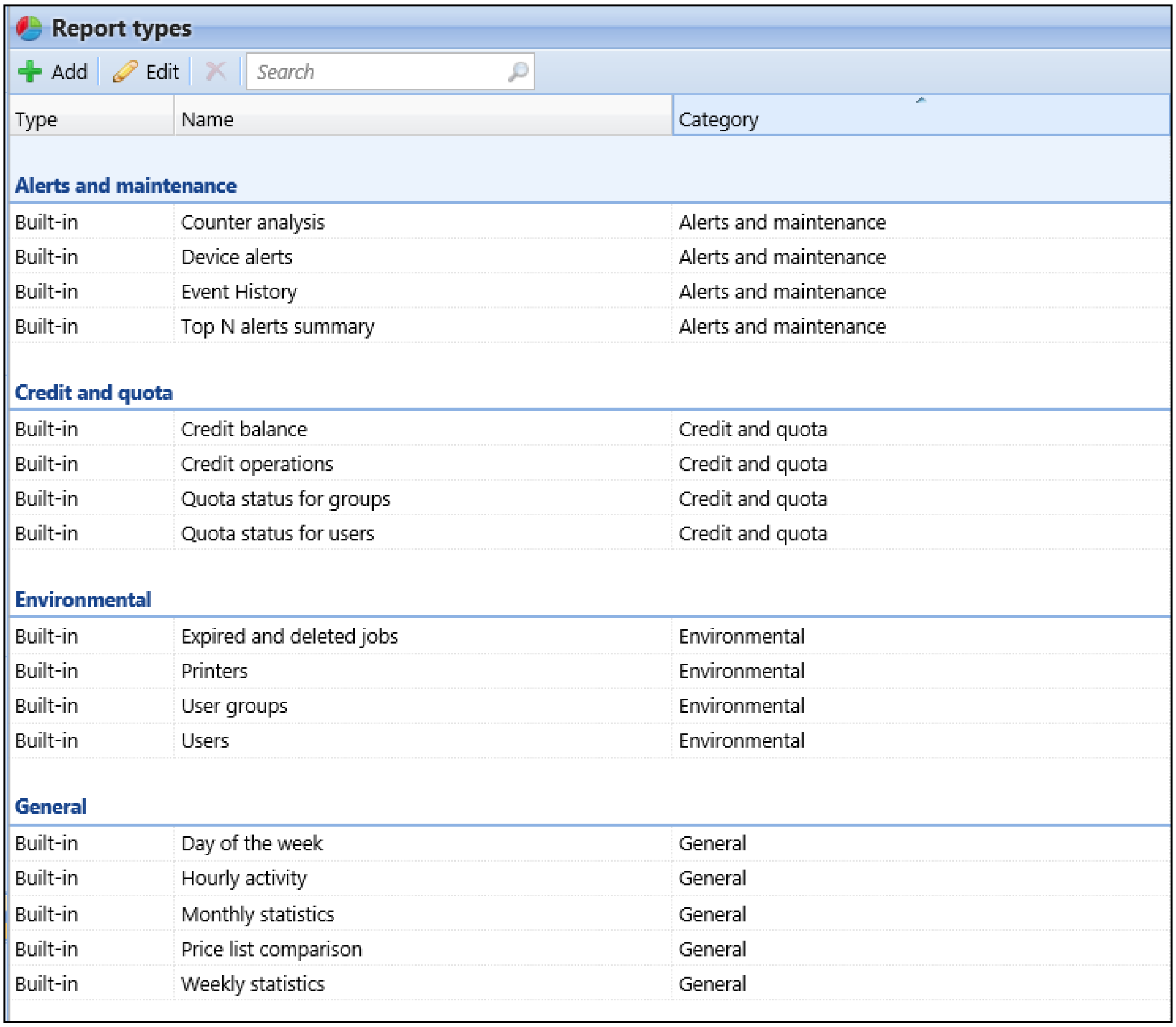
Each report can be directly displayed on the web interface and saved in any of the following formats: *PDF, CSV, XML, XLSX* and *ODS*. The reports can be automatically generated and stored in a predefined folder. There is no data limitation for the generated report, it includes all the data from the specified period.

All the reports have the MyQ logo displayed by default, but it can be replaced by your company's logo. To upload a custom logo go to **MyQ, Settings, Personalization**. In the **Custom application logo** section, click **+Add** next to **Custom logo** and upload your own file (supported formats - *JPG, JPEG, PNG, BMP* and recommended size - *398px x 92 px*).

23.1. Report Types

When you are creating reports on the **Reports** main tab, you can choose from a large number of built-in report types that are sorted into multiple categories. Some of the types are included in more categories (for example *Groups: Daily Summary*, *Print Jobs: Daily Summary*, etc.), while some of the types are particular to only one category (for example *Device Alerts* in *Alerts Maintenance* or *Credit Balance* in *Credit & Quota*).

You can overview all of the report types on the **Reports** settings tab, under **Report types** (in **MyQ, Settings, Reports**).



Type	Name	Category
Alerts and maintenance		
Built-in	Counter analysis	Alerts and maintenance
Built-in	Device alerts	Alerts and maintenance
Built-in	Event History	Alerts and maintenance
Built-in	Top N alerts summary	Alerts and maintenance
Credit and quota		
Built-in	Credit balance	Credit and quota
Built-in	Credit operations	Credit and quota
Built-in	Quota status for groups	Credit and quota
Built-in	Quota status for users	Credit and quota
Environmental		
Built-in	Expired and deleted jobs	Environmental
Built-in	Printers	Environmental
Built-in	User groups	Environmental
Built-in	Users	Environmental
General		
Built-in	Day of the week	General
Built-in	Hourly activity	General
Built-in	Monthly statistics	General
Built-in	Price list comparison	General
Built-in	Weekly statistics	General

FIGURE 12.9. All predefined reports are displayed on the **Reports** settings tab

23.1.1. Providing users with rights to use a report

The administrator can run all the built-in reports and provide other users and groups with rights to run them as well. In **MyQ, Settings, Reports**, right-click on a report and click **Edit**. On the **General** tab, in the **Permission for running the report** field, choose users and groups from the list and click **Save**.

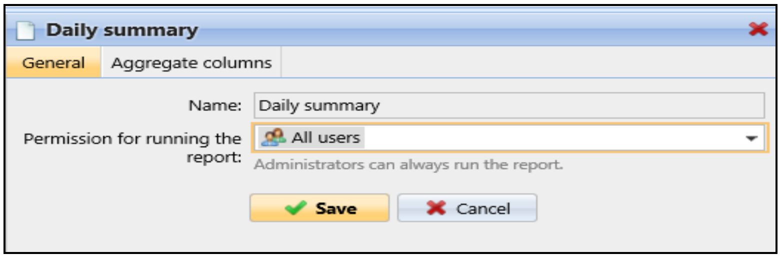


FIGURE 12.10. Grant users with rights to a report

INFO: You can also add custom report types developed by the MyQ development team. To do so, just click **+Add**, upload the custom report definition file, select users or groups to access it, and click **OK**. For more information about custom report types, please contact MyQ support.

Report Categories

Alerts and Maintenance

These reports provide information about device alerts and unusual changes on device counters.

Credit and Quota

These reports contain information concerning credit and quota, for example the remaining credit or the state of quota of selected users.

Environmental

These reports inform about the environmental impact of printing. They show how many trees needed to be harvested, how much energy was spent and how much carbon dioxide was emitted during the production of the paper used for printing and copying within your company's printing environment.

Data sources vary in their estimations. MyQ calculations in the report are based on the following data estimates:

- **Carbon dioxide for paper production**: 12,7 gram per paper sheet
- **Energy used for production**: 48 Wh per paper sheet or 32Wh for a recycled

paper sheet

- **Trees**: 8333 paper sheets are counted as 1 tree.

General

These reports provide general information about the MyQ system, such as total counters statistics and printing peaks or comparison of price lists used for printers.

Groups

These reports inform about groups of users. They can contain information about membership, printed pages, weekly stats etc.

Print Jobs

These reports contain information about jobs printed in MyQ, such as the list of all expired and deleted jobs over a certain period.

Printers

These reports inform about all the printing devices in the MyQ system (both local and network). Generated reports can contain graphs of the device usage, daily, weekly and monthly counters etc.

Projects

These reports contain information regarding projects and project accounting in MyQ, such as daily summary of projects or projects assigned to selected users over a certain period.

Users

These reports can contain various information about users. They can concern their print jobs, credit statements, printed pages etc.

23.1.2. Alerts and Maintenance Reports

The reports included in the Alerts and Maintenance category are:

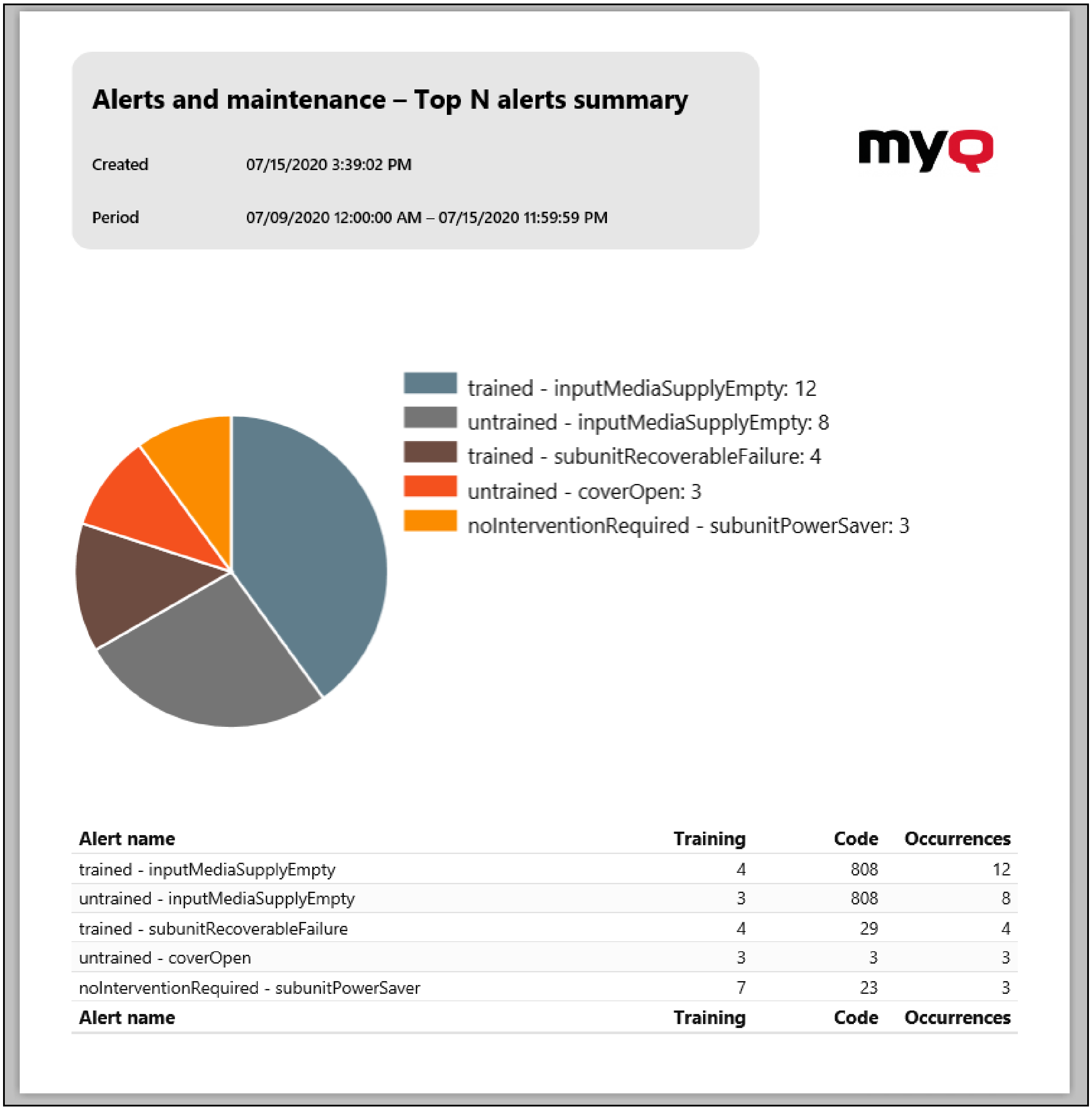
- **Counter Analysis**
- **Device alerts**
- **Event History**
- **Top N alerts summary**

Parameters, filters and columns available:

Name	Parameters	Filters	Default Columns	Group by
Counter Analysis	Period Page counter	Printer name Printer group User name User group Page counter value (<, =, >)	Printer name Full name Session finish date Page counter B&W pages Color pages Total pages Scans Total price (additional column: Administrator price)	User name
Device Alerts	Period	Printer Printer group Resolved time (>)	Alert training level Alert code Alert name Alert severity Start date Resolved date Resolved in (hours)	Printer name
Event History	Period	Event name Printer name Printer group	Event name Event type Printer name Created Resolved	
Top N Alerts Summary	Period N	Printer name Printer group	Alert name Alert training level Alert code Occurrences	Alert name

The above reports don't support aggregate columns.

Charts are not available, except for the **Top N alerts summary** report where a *Pie*, *Doughnut* or *Bar* chart can be selected with the **Alert name** and **Occurrences** values.



Alerts and maintenance – Top N alerts summary

Created 07/15/2020 3:39:02 PM

Period 07/09/2020 12:00:00 AM – 07/15/2020 11:59:59 PM

Alert name	Training	Code	Occurrences
trained - inputMediaSupplyEmpty	4	808	12
untrained - inputMediaSupplyEmpty	3	808	8
trained - subunitRecoverableFailure	4	29	4
untrained - coverOpen	3	3	3
noInterventionRequired - subunitPowerSaver	7	23	3
Alert name	**Training**	**Code**	**Occurrences**

FIGURE 12.11. **Top N alerts summary** report example

23.1.3. Credit and Quota Reports

The reports included in the Credit and Quota category are:

- **Credit balance**
- **Credit operations**
- **Quota status for groups**
- **Quota status for users**

Parameters, filters and columns available:

Name	Parameters	Filters	Default Columns	Additional Columns
Credit balance		User name User group	User name Full name User group Credit balance	Personal number Phone Email Notes
Credit operations	Period	User name User group	Full name User group Created (date & time) Credit charge Credit balance Operation type Charge method Charger name Voucher code	Personal number Phone Email Notes
Quota status for groups		User group	Quota name Quota period Counter type Counter limit Counter value Quota usage (%) Quota boosts Deny print Deny copy Deny scan Deny color print Deny color copy Deny mono print Deny mono copy	Quota valid from Quota valid till

Quota status for users		User name User group	Full name Quota name Target type Target name Quota period Counter type Counter limit Counter value Quota usage (%) Quota boosts Deny print Deny copy Deny scan Deny color print Deny color copy Deny mono print Deny mono copy	Quota valid from Quota valid till Personal number Phone Email Notes

The above reports don't support aggregate columns, they are all grouped by the *User name* parameter and charts are not available.

23.1.4. Environmental Reports

The reports included in the Environmental category are:

- **Expired and deleted jobs**
- **Printers**
- **User groups**
- **Users**

Parameters, filters and columns available:

Name	Parameters	Filters	Default Columns	Additional Columns
Expired and deleted jobs	Period	User name Queue name	Queue name Job name Created (date & time) Job size (KB) B&W pages Color pages Total pages Job owner user name Job owner full name Trees CO2 (gram) Energy (Wh) Energy recycled (Wh)	
Printers	Period	Printer name Printer group	Printer name Total pages Trees CO2 (gram) Energy (Wh) Energy recycled (Wh)	
User groups	Period	Printer name Printer group User name User group	User group Total pages Trees CO2 (gram) Energy (Wh) Energy recycled (Wh)	

Users	Period	Printer name Printer group User name User group	User name Full name Total pages Trees CO2 (gram) Energy (Wh) Energy recycled (Wh)	Personal number Phone Email Notes

1 tree = 8333 pages / 1 page = 12.7g of CO2 / 1 page = 48Wh of energy / 1 recycled page = 32Wh of energy

The above reports don't support aggregate columns or charts.

23.1.5. General Reports

The reports included in the General category are:

- **Day of the week**
- **Hourly activity**
- **Monthly statistics**
- **Price list comparison**
- **Weekly statistics**

Parameters, filters and columns available:

Name	Parameters	Filters	Default Columns	Chart
Day of the week	Period Page counter	Printer name Printer group User name User group	Period (Day) B&W pages Color pages Total pages Scans Total price Administrator price	Pie, Doughnut or Bar Category: Day of the week Values: Page counter
Hourly activity	Period Page counter	Printer name Printer group User name User group	Period (Hour) B&W pages Color pages Total pages Scans Total price Administrator price	Pie, Doughnut or Bar Category: Daily hours Values: Page counter
Monthly statistics	Period	Printer name Printer group User name User group	Period (Year - Month) B&W pages Color pages Total pages Scans Total price (Additional columns: Administrator price Simplex Duplex)	Line X-axis: Month & year Y-axis: Page counter

Price list comparison	Pricelist Item	Printer name Printer group	Printer name B&W price Color price	Bar Category: Printers 1st value: Pricelist item
Weekly statistics	Period	Printer name Printer group User name User group	Period (Year - Week) B&W pages Color pages Total pages Scans Total price (Additional columns: Administrator price Simplex Duplex)	Line X-axis: Month & year Y-axis: Page counter

The above reports don't support aggregate columns.

23.1.6. Groups Reports

The reports included in the Groups category are:

- **Daily summary**
- **Day of the week**
- **Monthly summary**
- **Top N**
- **Total summary**
- **User group membership**

Parameters, filters and columns available:

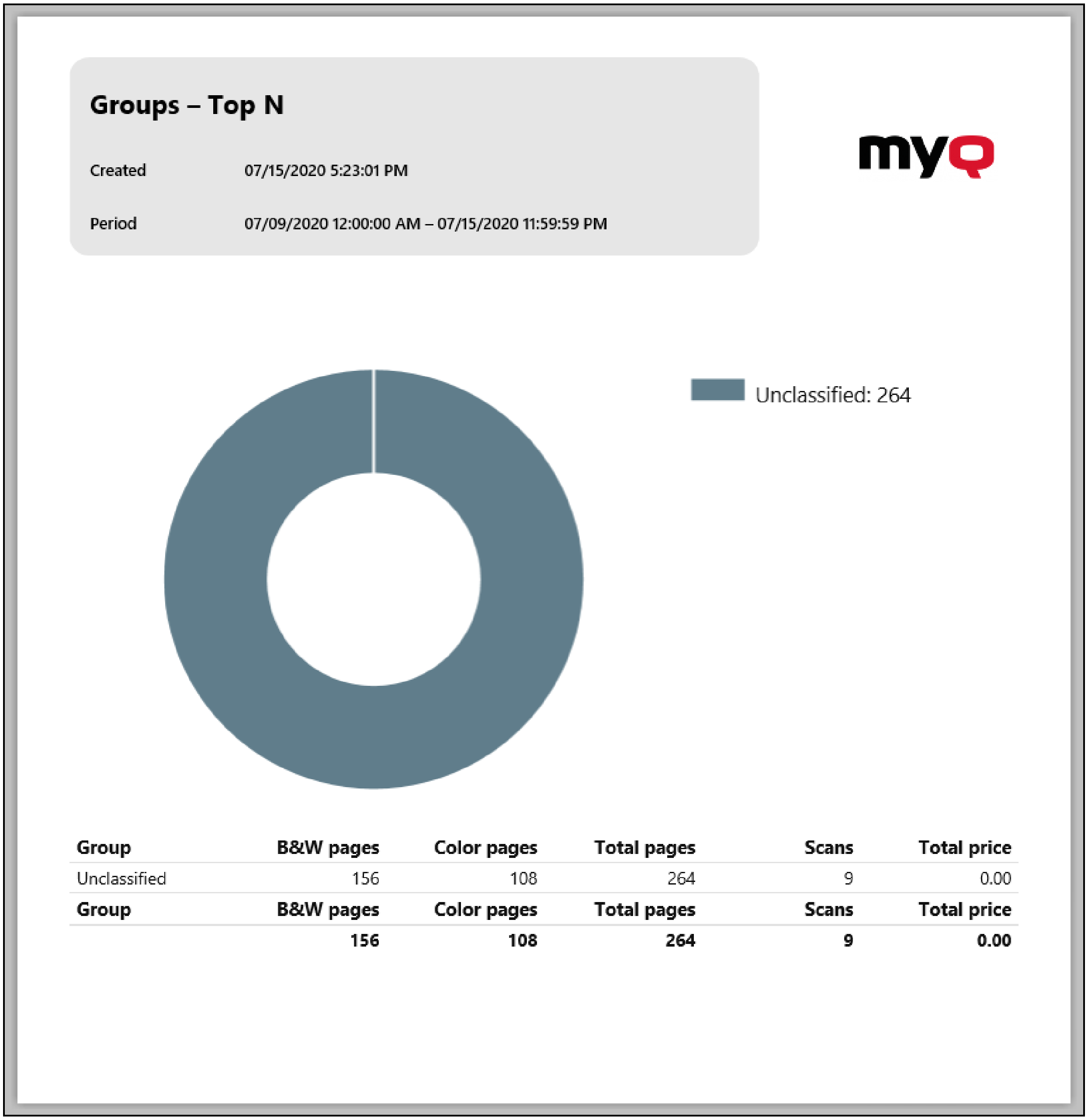
Name	Parameters	Filters	Default Columns	Group by
Daily summary	Period	Printer name Printer group User name User group	Date B&W pages Color pages Total pages Scans Total price	Group name
Day of the week	Period	Printer name Printer group User name User group	Day B&W pages Color pages Total pages Scans Total price	Group name
Monthly summary	Period	Printer name Printer group User name User group	Period (Year - Month) B&W pages Color pages Total pages Scans Total price	Group name Month & Year

Top N	Period Page counter N Add remaining sum	Printer name Printer group User name User group	Group name B&W pages Color pages Total pages Scans Total price	
Total summary	Period	Printer name Printer group User name User group Accounting group	Full name User name Group name Period (Year & Month) B&W print B&W copies Color print Color copies Total pages Scans Total price	Accounting group
User group membership		User group Accounting group Managed group	User name Full name Group name Accounting group Managed group	

Available additional columns: *Administrator price, B&W pages, Color pages, Total price, Single color copy, B&W prints, B&W copies, Color prints, Color copies, B&W cost, Color cost, Fax, A4 paper, A3 paper, A5 paper, B4 paper, B5 paper, Other paper, Folio paper, Ledger paper, Legal paper, Letter paper, Statement paper, Rest of paper formats, Color pages (L1), Color cost (L1,) Color pages (L2,) Color cost (L2), Color pages (L3), Color cost (L3), Print color pages (L1), Copy color pages (L1), Cost color pages (L1), Print color pages (L2), Copy color pages (L2), Cost color pages (L2), Print color pages (L3), Copy color pages (L3), Cost color pages (L3), Simplex, Duplex, Personal number, Phone, Email, Notes, Day number.*

The above reports don't support aggregate columns except for the **Monthly summary** and the **Total summary** reports.

Charts are not available, except for the **Top N** report, where a *Pie*, *Doughnut* or *Bar* chart can be selected with the **Groups** and **Page Counter** values.



Groups – Top N

Created 07/15/2020 5:23:01 PM

Period 07/09/2020 12:00:00 AM – 07/15/2020 11:59:59 PM

Unclassified: 264

Group	B&W pages	Color pages	Total pages	Scans	Total price
Unclassified	156	108	264	9	0.00
Group	**B&W pages**	**Color pages**	**Total pages**	**Scans**	**Total price**
	156	**108**	**264**	**9**	**0.00**

FIGURE 12.12. **Top N** report example

23.1.7. Printers Reports

The reports included in the Printers category are:

- **Daily summary**
- **Day of the week**
- **Meter reading via SNMP**
- **Monthly summary**
- **Top N**
- **Total summary**

Parameters, filters and columns available:

Name	Parameters	Filters	Default Columns	Group by
Daily summary	Period	Printer name Printer group User name User group	User name Full name Date B&W pages Color pages Total pages Scans Total price	Printer name
Day of the week	Period	Printer name Printer group User name User group	Day B&W pages Color pages Total pages Scans Total price	Printer name

Meter reading via SNMP	Period	Printer name Printer group	Printer name IP address Serial number MAC address Model Location Terminal ID B&W prints B&W copies Color prints Color copies Scans Fax counter	
Monthly summary	Period	Printer name Printer group User name User group	IP address Serial number MAC address Model Location B&W pages Color pages Total pages Scans Total price	Printer name Month & Year
Top N	Period Page counter N Add remaining sum	Printer name Printer group User name User group	Printer name B&W pages Color pages Total pages Scans Total price	Pie, Doughnut, Bar Category-Printers Values-Page counter
Total summary	Period	Printer name Printer group User name User group	Printer name User group User name Full name Total pages B&W prints B&W copies Color prints Color copies Scans Total price	Printer name

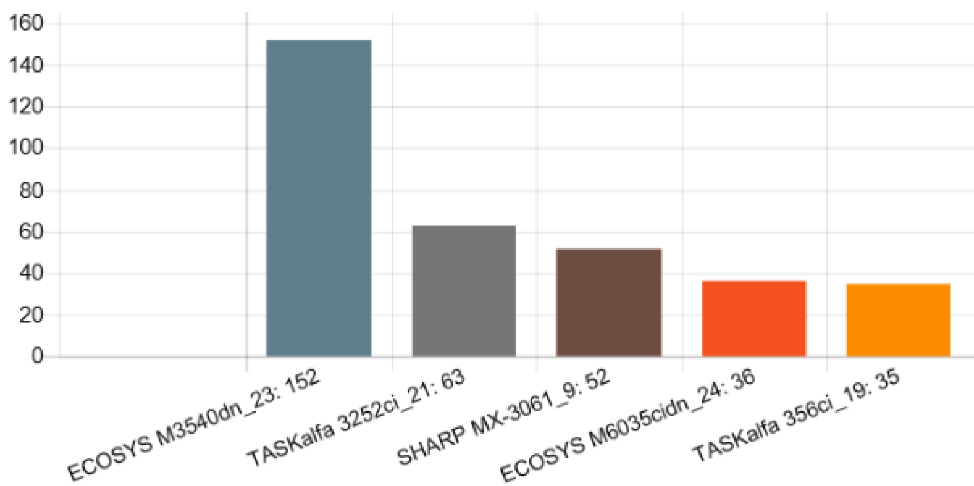
Available additional columns: *Administrator price, Printer ID, B&W pages, Color pages,* *Total price, Single color copy, B&W prints, B&W copies, Color prints, Color copies, B&W cost, Color cost, Fax, A4 paper, A3 paper, A5 paper, B4 paper, B5 paper, Other paper, Folio paper, Ledger paper, Legal paper, Letter paper, Statement paper, Rest of paper formats, Color pages (L1), Color cost (L1,) Color pages (L2,) Color cost (L2), Color pages (L3), Color cost (L3), Print color pages (L1), Copy color pages (L1), Cost color pages (L1), Print color pages (L2), Copy color pages (L2), Cost color pages (L2), Print color pages (L3), Copy color pages (L3), Cost color pages (L3), Start Mono, Start color, Finish Mono, Finish color, Finish M print, Finish C print, Finish M copy, Finish C copy, Finish scan, Simplex, Duplex, Personal number, Phone, Email, Notes, Day number.*

Aggregate columns are supported in the above reports, except for the **Top N** and the **Monthly summary** reports.

Charts are not available, except for the **Top N** report, where a *Pie*, *Doughnut* or *Bar* chart can be selected with the **Printers** and **Page Counter** values.

Printers – Top N

Created	07/16/2020 9:57:11 AM
Period	07/10/2020 12:00:00 AM – 07/16/2020 11:59:59 PM



Printer	B&W pages	Color pages	Total pages	Scans	Total price
ECOSYS M3540dn_23	152	0	152	0	0.00
TASKalfa 3252ci_21	7	56	63	0	0.00
SHARP MX-3061_9	41	11	52	5	0.00
ECOSYS M6035cidn_24	17	19	36	0	0.00
TASKalfa 356ci_19	0	35	35	0	0.00
Printer	**B&W pages**	**Color pages**	**Total pages**	**Scans**	**Total price**
	217	**121**	**338**	**5**	**0.00**

FIGURE 12.13. **Top N** Printers report example

23.1.8. Print Jobs Reports

The reports included in the Print Jobs category are:

- **Daily summary**
- **Expired and deleted jobs**
- **Favorite jobs**
- **Printed jobs summary**

Parameters, filters and columns available:

Name	Filters	Default Columns	Additional Columns	Group by
Daily summary	User name Job name	Full name Created (date & time) Printed (date & time) Job name Document time	Queue name Personal number Phone Email Notes Total pages B&W pages Color pages	User name
Expired and deleted jobs	User name User group Queue name	Full name User name Job name Created (date & time) Document type Duplex Job size (KB) Total pages B&W pages Color pages	Personal number Phone Email Notes Trees CO2 (gram) Energy (Wh) Energy recycled (Wh)	Queue name

Favorite jobs	User name User group Queue name	Queue name Full name Job name Created (date & time) Job size (KB) B&W pages Color pages Total pages Min Price Max Price	Personal number Phone Email Notes	User name
Printed jobs summary	User name User group Job name	Full name Period Queue name Printed (date & time) Job name Document type	Personal number Phone Email Notes Total pages B&W pages Color pages	User name Month & Year

All the reports use the *Period* parameter.

Charts are not available.

The reports don't support aggregate columns except for the **Expired and deleted jobs** reports, where aggregate columns are available.

23.1.9. Projects Reports

The reports included in the Projects category are:

- **Daily summary**
- **Day of the week**
- **Monthly summary**
- **Print jobs per project**
- **Project groups total summary**
- **Projects per user**
- **Top N**
- **User project assignment**
- **Users per project**

Parameters, filters and columns available:

Name	Parameters	Filters	Default Columns	Group by
Daily summary	Period	Project name Printer name Printer group User name User group	Date B&W pages Color pages Total pages Scans Total price	Project name
Day of the week	Period	Project name Printer name Printer group User name User group	Date B&W pages Color pages Total pages Scans Total price	Project name

Monthly summary	Period	Project name Printer name Printer group User name User group	Period (year - month) B&W pages Color pages Total pages Scans Total price	Project name Month & Year
Print jobs per project	Period	Project name Job name User name	Job name Printed (date & time) Document type	Project name
Project groups total summary	Period	Project name	Project name B&W pages Color pages Total pages Scans Total price	Project name
Projects per user	Period	Project name Printer name Printer group User name User group	Full name Personal number Project name B&W pages Color pages Total pages Scans Total price	User name
Top N	Period Page counter N Add remaining sum	Project name Printer name Printer group User name User group	Project name B&W pages Color pages Total pages Scans Total price	
User project assignment		Project name Printer name Printer group User name User group	Full name Personal number Project name B&W pages Color pages Total pages Scans Total price	Project name
Users per project	Period	Project name Printer name Printer group User name User group	User name Full name Project name	User name

Available additional columns: *Administrator price, B&W pages, Color pages, Total price, Single color copy, B&W prints, B&W copies, Color prints, Color copies, B&W cost, Color cost, Fax, A4 paper, A3 paper, A5 paper, B4 paper, B5 paper, Other paper, Folio paper, Ledger paper, Legal paper, Letter paper, Statement paper, Rest of paper formats, Color pages (L1), Color cost (L1,) Color pages (L2,) Color cost (L2), Color pages (L3), Color cost (L3), Print color pages (L1), Copy color pages (L1), Cost color pages (L1), Print color pages (L2), Copy color pages (L2), Cost color pages (L2), Print color pages (L3), Copy color pages (L3), Cost color pages (L3), Simplex, Duplex, Personal number, Phone, Email, Notes, Day number.*

Aggregate columns are supported in the above reports, except for the **Print jobs per project**, **Top N** and the **User project assignment** reports.

Charts are not available, except for the **Top N** report where a *Pie*, *Doughnut* or *Bar* chart can be selected with the **Page Counter** values.

23.1.10. Users Reports

The reports included in the Users category are:

- **Daily summary**
- **Day of the week**
- **Monthly summary**
- **Session details**
- **Top N**
- **Total summary**

Parameters, filters and columns available:

Name	Parameters	Filters	Default Columns	Group by
Daily summary	Period	Printer name Printer group User name User group	Full name Date B&W pages Color pages Total pages Scans Total price	User name
Day of the week	Period	Printer name Printer group User name User group	Full name Day B&W pages Color pages Total pages Scans Total price	User name
Monthly summary	Period	Printer name Printer group User name User group	Full name Period (year-month) B&W pages Color pages Total pages Scans Total price	User name Month & Year

Session details	Period	Printer name Printer group User name User group	User group Full name Printer name Job name Date Total pages Scans	User name
Top N	Period Page counter N Add remaining sum	Printer name Printer group User name User group	User name Full name B&W pages Color pages Total pages Scans Total price	
Total summary	Period	Printer name Printer group User name User group	User name Full name B&W prints B&W copies Color prints Color copies Total pages Scans Total price	User name

The above reports don't support aggregate columns.

Charts are not available, except for the **Top N** report where a *Pie*, *Doughnut* or *Bar* chart can be selected with the **Users** and **Page Counter** values.

23.1.11. Creating new aggregate columns

For some types of reports, you can create any number of custom aggregate (summary) columns. An aggregate column can display either the sum or the average of a selection of any number of other columns available for the type.

To create a new aggregate column for a report:

1. On the list of the report types on the **Reports** settings tab, double click the report where you want to create the new aggregate column. The report properties panel opens on the right side of the screen.

FIGURE 12.14. Opening the properties panel of the Daily summary report type

2. Click **Aggregate columns** .

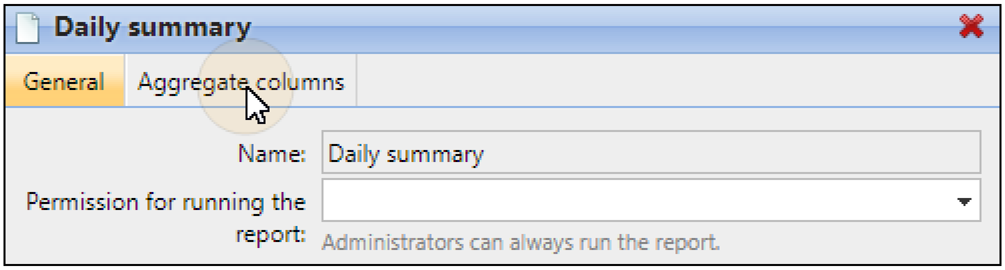


FIGURE 12.15. Opening the Aggregate columns tab

3. Click **+Add**.
   The properties panel of the new column opens.

4. In the panel:
   a. **Name** the column.

   b. Select the **Operation** you want to use (*Sum* or *Average*).

   c. Add one or more columns from the list to be included in the calculation.

5. Click **Save**.
   The new aggregate column is listed on the **Aggregate column** tab.

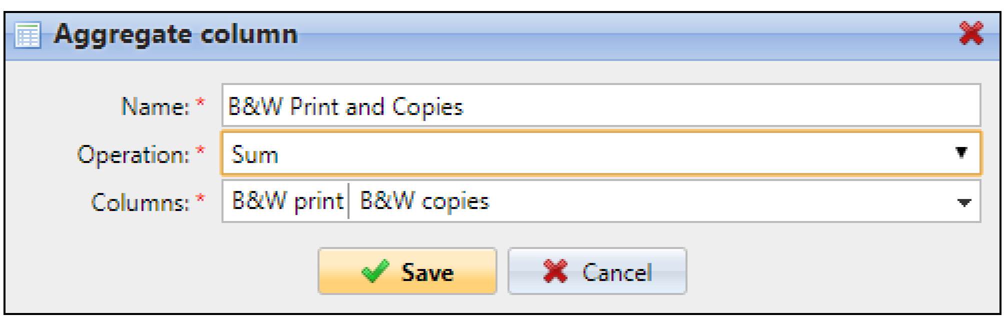


FIGURE 12.16. Opening the properties panel of the Daily summary report type

Supported types of reports for aggregate columns

The aggregate (summary) columns can be created for the following types of reports:

Category	Type
Groups	Monthly summary
Groups	Total summary
Print jobs	Expired and deleted jobs
Printers	Daily summary
Printers	Day of the week
Printers	Meter reading via SNMP
Printers	Total summary
Projects	Daily summary
Projects	Day of the week
Projects	Monthly summary
Projects	Project groups total summary
Projects	Projects per user
Projects	Users per project

23.2. Reporting sources

Accounting in MyQ depends on the MyQ server version, the MyQ embedded terminal version and the printing device. MyQ 8.0+ currently uses the user-session architecture. The values in every report are based on user sessions (except for the **Meter reading via SNMP** printers report, described below).

- Counters are calculated in the following way:
  - B&W pages = B&W prints + B&W copies + Fax
  - Color pages = Color prints + Color copies + Single color copy
  - Total Pages = B&W pages + Color pages
  - Total prints = B&W prints + Color prints
  - Total copies = B&W copies + Color copies
- Price related columns include discounts.
- Any printers monitored via MyQ Smart Print Services are included in the reports.
- Any non-MyQ users activity (**unauthenticated*) is included in the reports.
- MyQ does not track deleted printers. If a deleted printer is later added and activated in MyQ, the reports will not include any activity during the time the device was deleted.

- If a printer is deactivated but not deleted, the reports include information about the period it was inactive only after it is reactivated. In that case, after the reactivation, all the activity is accounted to users not authenticated in a single session. The reports cannot include printers' data while they are deactivated.
- When an embedded terminal is installed on the printing device, accounting is also done for any direct / tandem print queues of the device.
- When an embedded terminal is not installed or a device is used with a MyQ Hardware terminal, accounting is done via SNMP by the MyQ Print Server (depends on provided data via SNMP from the device).

23.2.1. Values calculation in the Meter reading via SNMP printers report

The values in this report are based on counters read directly from the printers.

- Any printers monitored via MyQ Smart Print Services are **not** included in the reports.
- The highest and lowest values are compared for a selected period and printer/group of printers.
- The total value displayed in the report is the summary of all the subtotal values, without *Pages printed* while the device was deactivated.

23.3. Report values description

Description of values in the reports' default and additional columns and how they are accounted.

These values are accounted as page counts in the following way: 2 clicks for the A3/ Ledger page format and 1 click for the rest (A4 etc..); in case of Duplex, it is 4 clicks for the A3 / Ledger format and 2 clicks for the rest (A4 etc.). L formats are coverage counters.

- B&W prints
- B&W copies
- Color prints
- Color copies
- Single color copy

- Total prints
- Total copies
- Fax
- Color pages (L1)
- Color cost (L1)
- Color pages (L2)
- Color cost (L2)
- Color pages (L3)
- Color cost (L3)
- Print color pages (L1)
- Copy color pages (L1)

These values are accounted as paper sheets in the following way : 1x A3 / 1x A4 etc.

- A4 paper
- A3 paper
- A5 paper
- B4 paper
- B5 paper
- Other paper
- Folio paper
- Ledger paper
- Legal paper
- Letter paper
- Statement paper
- Rest of the paper formats

These values are accounted as paper sheets as well, however, when a printing device is used without an installed Embedded terminal, this counter is specified via SNMP and depends on the counter used from the printing device.

- Simplex
- Duplex

A job printed in 1x A3 monochrome sheet, on both sides in duplex mode, on a device where an Embedded terminal is installed, is accounted in MyQ as 1x A3 paper + 4x print monochrome and 1x duplex. In the MyQ log it will look like this:

PM=4, A3=1, Duplex=1

23.4. Creating and editing reports

You can create a new report in a few steps:

1. At the top-right corner of the **Reports** main tab, click **+Add**, and then click **+ New report**. The **New report** dialog box appears.

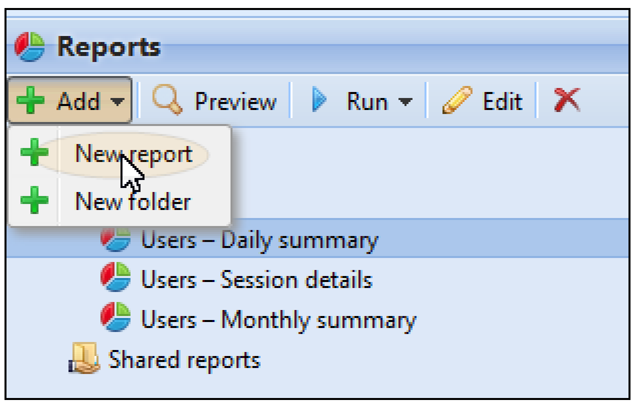


FIGURE 12.17. Adding the new report

2. In the box, select the type of the new report and the folder to place it, and then click **OK**. The editing panel of the new report opens. On the panel, edit and save the report.

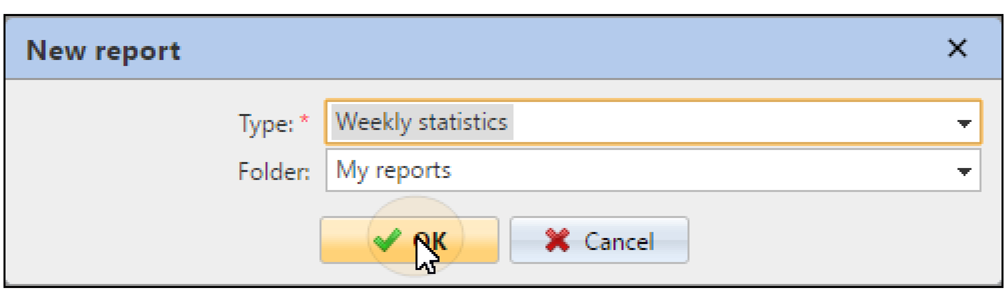


FIGURE 12.18. Submitting the new report's type and folder and opening its editing options

Editing a report

1. On the **General** sub tab of the report's editing tab, you can change the report's **Name**, add a **Description**, select **Sharing** rights, meaning the users or groups who will have the rights to **Run** the report and those who will have the rights to **Edit** the report. You can also click **Schedule** to set its scheduled run. Once done, click **Design** to open the **Design** sub tab of the report.

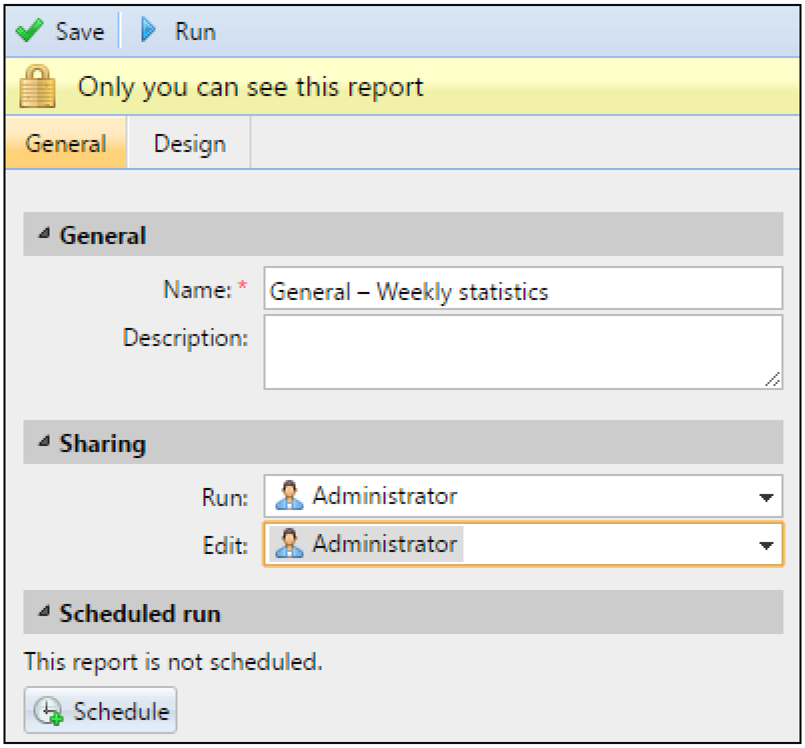


FIGURE 12.19. General sub tab of the new report properties

2. On the **Design** sub tab, you can set the report's layout, select the items (Users, Printers etc.) to be included in the report, add or remove columns and change their order.

Options

- **Orientation**: Select either the **Portrait**, or the **Landscape** orientation.

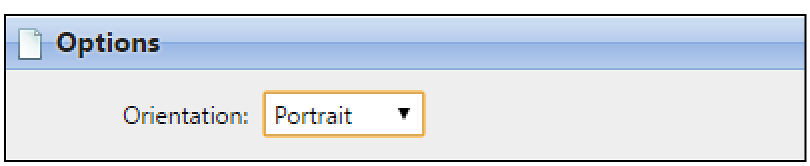


FIGURE 12.20. Orientation setting on the Design subtab of the report's editing panel

Filters and parameters

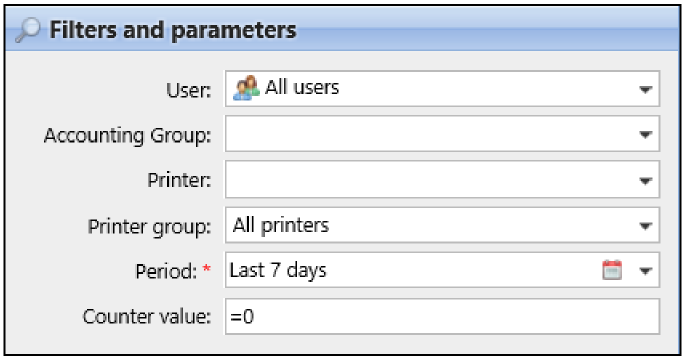
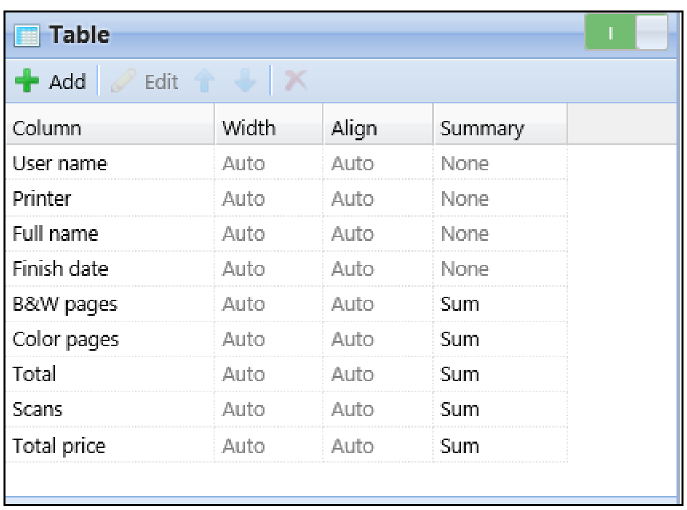


FIGURE 12.21. Filters and parameters on the Design subtab of the report's editing panel

Available filters and parameters differ depending on the report type. These are the main parameters available for most of the standard reports types:

- **User**: Select the users to be included in the report. If you select the **Me** option and share this report with all users, each user can only see just the data that concern themselves; this way you can make personalized reports for each user.
- **Accounting Group**: Select the accounting groups of users to be included in the report.
- **Printer**: Select the printers to be included in the report.
- **Printer group**: Select the groups of printers to be included in the report.
- **Period**: Select the time period to be covered by the report.

Table



Column	Width	Align	Summary
User name	Auto	Auto	None
Printer	Auto	Auto	None
Full name	Auto	Auto	None
Finish date	Auto	Auto	None
B&W pages	Auto	Auto	Sum
Color pages	Auto	Auto	Sum
Total	Auto	Auto	Sum
Scans	Auto	Auto	Sum
Total price	Auto	Auto	Sum

FIGURE 12.22. Table layout setting on the Design subtab of the report's editing panel

Here you can enable and disable the table.

You can also add and remove columns to the table, edit them and change their order. For each column, you can change the width, alignment and the type of summary that will be shown on the final (bottom) row (**Sum**, **Average** or **None**).

To add a new column, click **+Add**. To open the editing options of an existing column, double-click it (or select it, and then click **Edit**). To remove a column, select it and click . To move a column up or down the order, select it, and then use the / arrows.

Period	B&W pages	Color Pages	Total	Scans	Total price
2017-3	5,621	9,189	14,810	5,506	$5,440.000
2017-4	1,211	569	1,780	1,234	$7,072.000
Period	**B&W pages**	**Color Pages**	**Total**	**Scans**	**Total price**
	6,832	**9,758**	**16,590**	**6,740**	**$12,512.000**

FIGURE 12.23. An example of a generated tab

NOTICE: Some reports do not include the option to use tables and their data can be displayed only in the chart form.

Chart

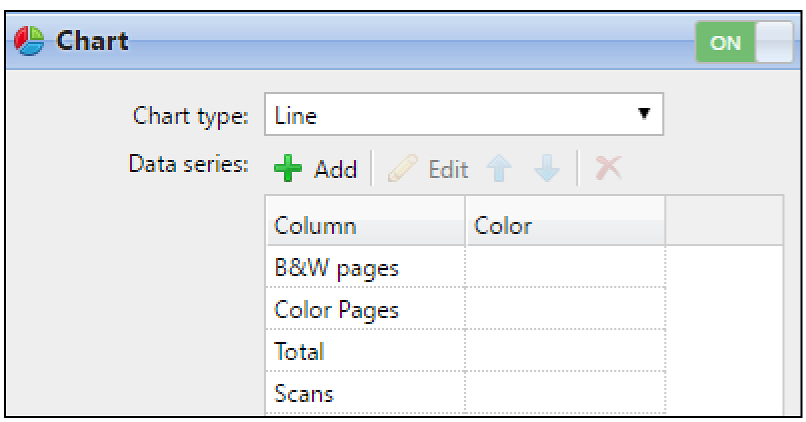


FIGURE 12.24. Designing the chart on the report's editing panel

Here you can enable and disable the chart.

You can also select from the **Bar**, **Line**, **Pie** and **Doughnut** chart types. Furthermore, you can add and remove data types to be shown on the chart and select colors for each data type.

To add a data type, click **+Add**. To open editing options of a data type, double-click it (or select it, and then click **Edit**). To remove a data type, select it and click ✖. To move a data type up or down the order, select it, and then use the ⬆ / ⬇ arrows.

INFO: Some reports do not include the option to use charts and their data can be displayed only in the table form.

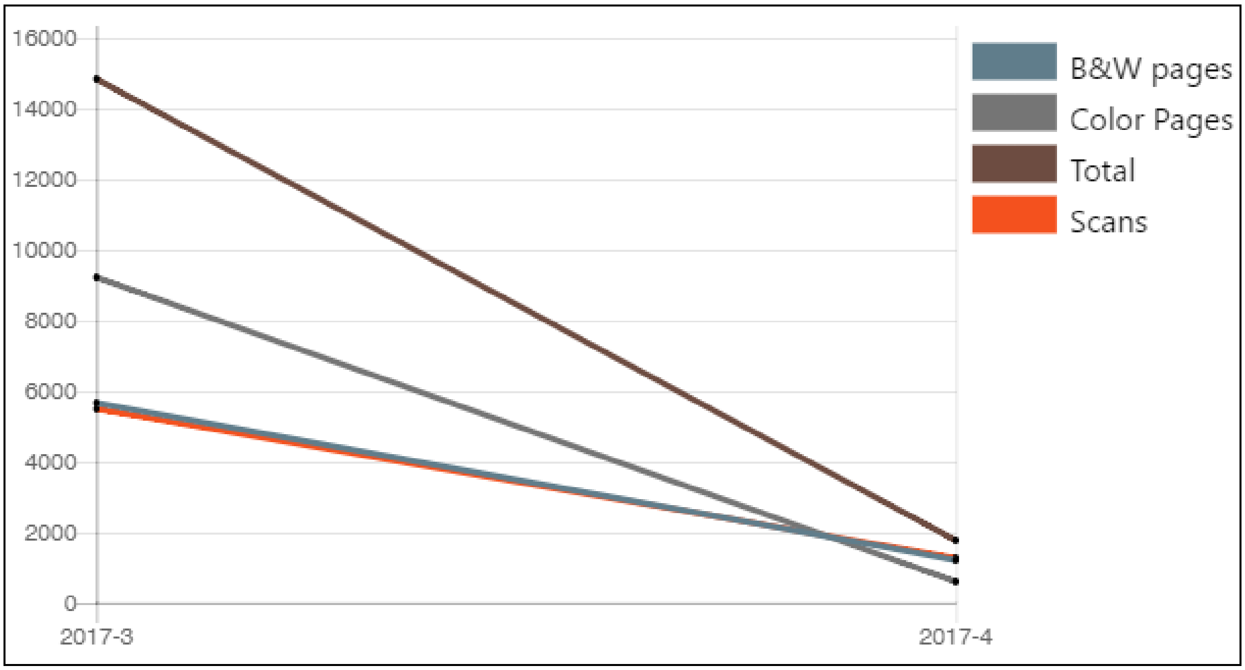


FIGURE 12.25. An example of a generated line chart

3) Designing your own reports can be a bit tricky, since it always depends on many factors - amount of data included (columns), length of column names and values, report orientation etc. To get the best result, you can click **Preview** anytime during the report's creation to check what the new design will look like. Only after you are satisfied with the layout, click **Save** to save the report.

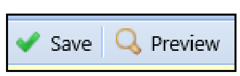


FIGURE 12.26. Save/Preview reports

23.5. Generating reports

To preview a report

- Select the report and click **Preview** (or right-click it and click **Preview** on its shortcut menu). The report is shown in HTML format and the number of included data is limited.

To run a report

- Select the report and click **Run**. (Or right-click it and click **Run** on its shortcut menu). The report runs in the specified format (*PDF, CSV*, *XML*, *XLS* or *ODS*) with no data limitation.

To export the displayed report

- After the report is generated, click one of the format buttons on the bar at the top of the report screen to download it.

FIGURE 12.27. The format selection bar is visible above the report preview on the left side of the screen

NOTICE: There is a fixed limit of records of the reports that are generated on the **Reports** main tab of the MyQ Web Interface. It can be set in the **Limit results to:** text box on the **Reports** settings tab (**MyQ / Settings / Reports**). It is set to **1000** by default. This only applies to the reports run on the MyQ Web Interface, scheduled reports are always complete.

24. System health check

This option presents you with an overview of error messages with the level of severity added after some registered checks are done. The errors concern database health, disk space availability, PIN length settings and time zone configuration. They are listed in the table below.

Code	Severity	Description
101	High	Main database health is not good; multiple messages can appear in the log
102	High	Log database health is not good; multiple messages can appear in the log.
103	Medium	PIN length needs to be increased; see PIN generation
104	High	Disk space is on warning level; see Disk space check
101	Critical	Disk space is on critical level; see Disk space check
106	High	Timezones misconfiguration; see Time zone

When the error message has the severity Critical the administrator gets an email.

Every error message with a higher severity as Low will be logged in the MyQ main log.

24.1. Using system health check

To access the system health check overview go to **MyQ, System health check**, or click on the system health check icon on the top-right side of the window.

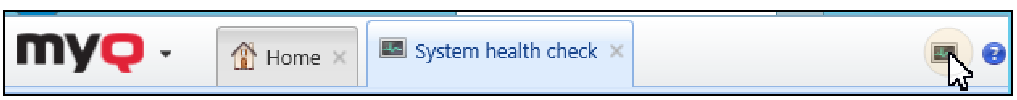


FIGURE 12.28. System health check icon

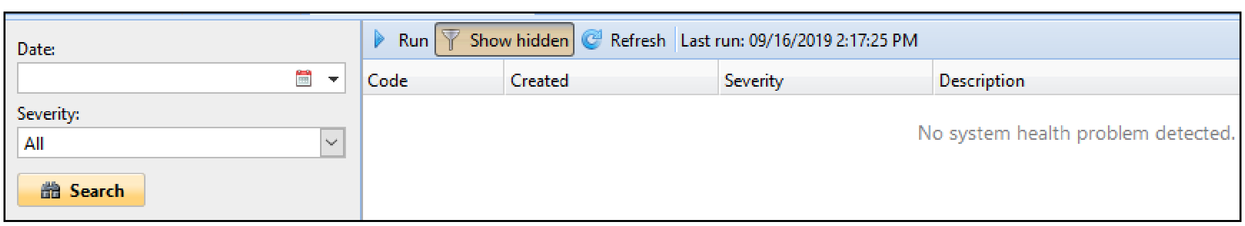


FIGURE 12.29. System health check

1. Set your search criteria in the left pane.
    a. You can search for errors on a specific **Date** by clicking the calendar icon. If you want to set a wider range search , click the arrow to choose a date selector:

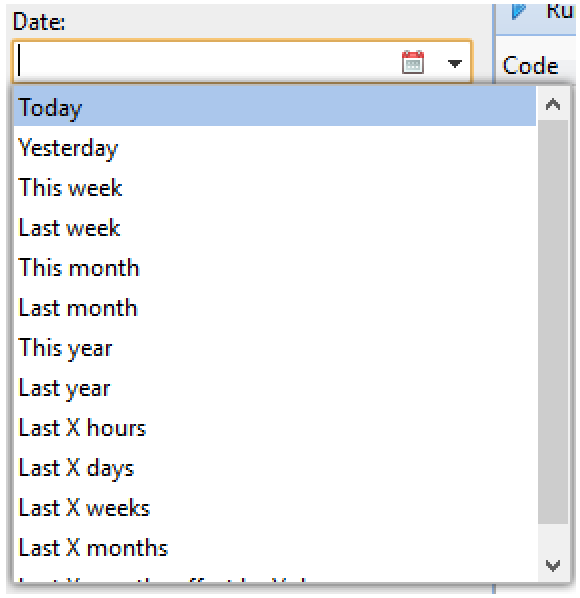


FIGURE 12.30. Date options

b. Select a **Severity** from the drop down list.

2. Click **Search**. The search result is shown in the right pane.

3. Click **Run** to trigger the System health check Task scheduler to perform a check with these date and severity settings.

25. Scan Management

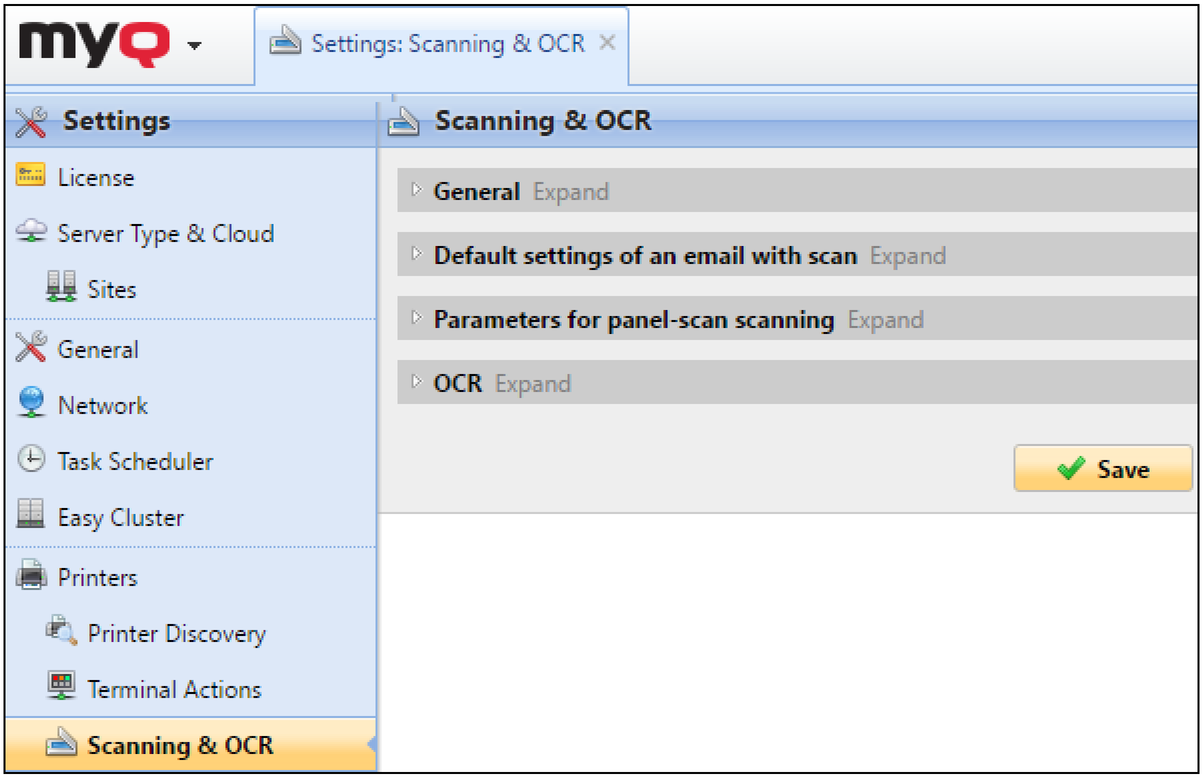


FIGURE 13.1. Scanning & OCR settings tab

The MyQ system is able to automatically send scanned documents a specified folder or email belonging to the scanning user, let us call it the **Scan to Me** feature. With the feature enabled, MyQ serves as an email server — it receives a scanned job from printing devices via the SMTP protocol, detects the device from which the job is sent, finds the user that is currently logged on the device and sends the job to their folder or email (depends on the user's settings).

The first section of this topic shows you how to set up the Scan to Me feature on the MyQ server and how to use it. The following two sections present two advanced scanning options in MyQ: limiting the size of emails with scans and scanning to OCR. In the last section, you can view the table of all MyQ email commands.

INFO: Scan to Me is also one of the essential features of the MyQ Embedded terminals. Apart from it, the embedded terminals offer a large number of advanced destinations such as Cloud and FTP servers.

25.1. Scan to Me

First, you need to set up the feature on the MyQ server and on the printing device to enable the MyQ users to use all of the scanning options. After that, you need to provide the users with receiver email addresses, where they can direct the scanned documents.

25.1.1. Setting up the feature

The setup of the feature consists of the following consecutive steps:

- Enable and setup scanning on the MyQ server;
- Set SMTP on the printing device;
- Set the destinations for the MyQ users on the MyQ server.

Enable and setup scanning on the MyQ server

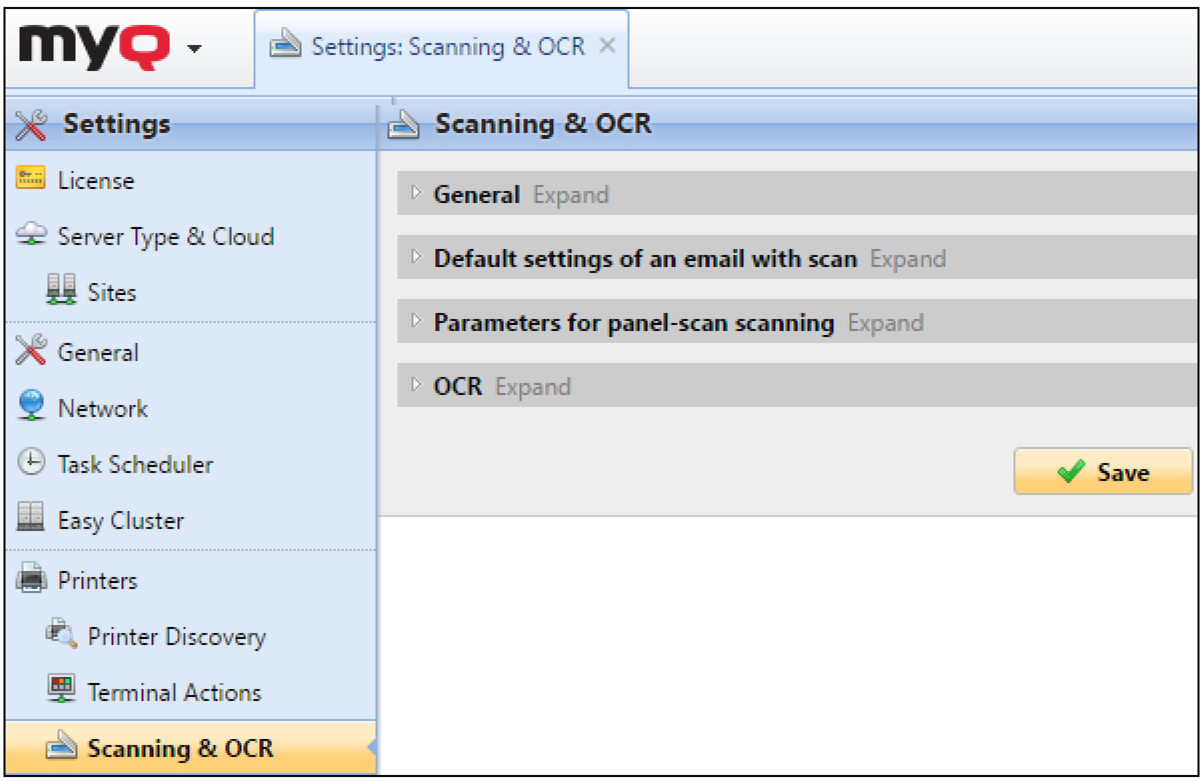


FIGURE 13.2. The **Scanning & OCR** settings tab

- Enable scanning on the **Scanning & OCR** settings tab, under **General**.
- You can also change the subject and message of the email with the scanned document there. As the sender of the document, you can select either email of the **logged user** or the **default sender** email set on the **Network** settings tab, under **Outgoing SMTP server**.

> **NOTICE:** The outgoing SMTP server has to be set up on the **Network** settings tab, under **Outgoing SMTP server**. For information about how to set up the server, see *"Outgoing SMTP server"* on page 48.

Set SMTP on the printing device

The scanning function requires enabling SMTP protocol, setting SMTP server address and entering a sender email on the printing device web interface. For information about how to enter the printing device web interface and find the particular settings, see the printing device manual.

To enable the scanning function, take the following steps in any order on the printing device web interface:

- Enable SMTP protocol.
- Enter MyQ server IP address or host name.
- Ensure that the SMTP port is the same as the SMTP port in the **Network** settings tab, under **MyQ SMTP server**. The default port in MyQ is 25. (For more information, see *"HTTP Proxy Server "* on page 49.)
- Enter sender email address. The address value is arbitrary.

Set the destinations for the MyQ users on the MyQ server

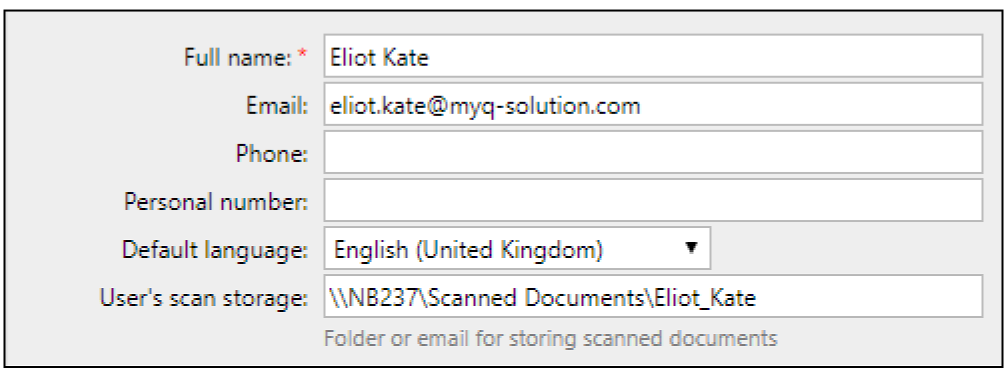


FIGURE 13.3. Setting the scanning destinations on the user properties panel

On the properties panel of each individual MyQ user (see *"Editing user accounts"* on page 120), you can set the destinations for the three options the feature: Sending scans to the user's primary email, Sending scans to other predefined emails, Storing scans to the user's scan folder.

To provide a user with these options, set the appropriate fields on the their properties panel according to the following table:

OPTION	PARAMETER	VALUE
Sending scans to the user's primary email	Email	User's primary email address (see *"Sending scans to the user's primary email"* on the facing page)
Sending scans to other emails	User's scan storage	Any number of email addresses separated by commas (see *"Sending scans to other emails"* on the facing page)
Storing scans to the user's scan folder	User's scan storage	Folder where the document should be stored (see *"Storing scans to the user's scan folder"* on the facing page)

NOTICE: You can set the parameters when adding, importing or synchronizing the user and later change them in their account settings. For more information, see *"User information and settings"* on page 121.

25.1.2. Using the Scan to Me feature

To send the email to the desired destination, the scan needs to be directed to a specific receiver email address. There are two options to enable MyQ users to send the scans there: provide them with the respective receiver email address, or predefine these email addresses on the printing device's Web User Interface.

Email addresses for Scan to Me

Sending scans to the user's primary email

The scanned document is sent to the user email set in the **email** text box on the user properties panel.

The receiver email address has to be *email@myq.local*.

Sending scans to other emails

The scanned document is sent to all emails set in the **User's scan storage** text box (multiple emails are separated by commas) on the user properties panel.

The receiver email address has to be *folder@myq.local*.

Storing scans to the user's scan folder

You have to create a shared folder and ensure that MyQ has access to this folder. After this, enter the folder's location to the **User's scan storage** text box.

The scanned document is sent to MyQ, and then stored in the shared folder via SMB protocol. The stored document file name consists of the user account name, the date and the time when the scan was sent.

The receiver email address has to be *folder@myq.local*.

> **NOTICE:** To enable MyQ to save the scan file in the user scan folder, you have to make sure that the folder is shared over your network and that the computer on which you run MyQ has all the necessary access rights to this folder.

Predefined list of the MyQ destinations on the printing device

On the Address List on the printing device's web interface, you can predefine email addresses where the scanned documents are sent.

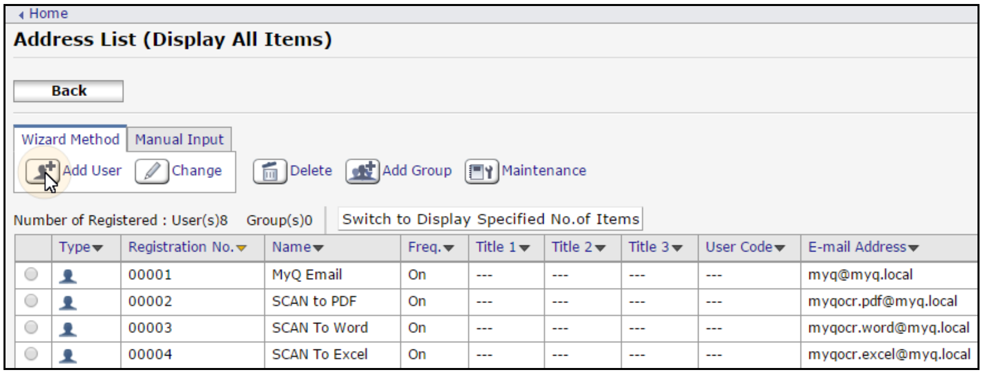


FIGURE 13.4. Defining scan destinations on the printing device's Web UI

25.2. Scan size limit, sending scans exceeding the limit

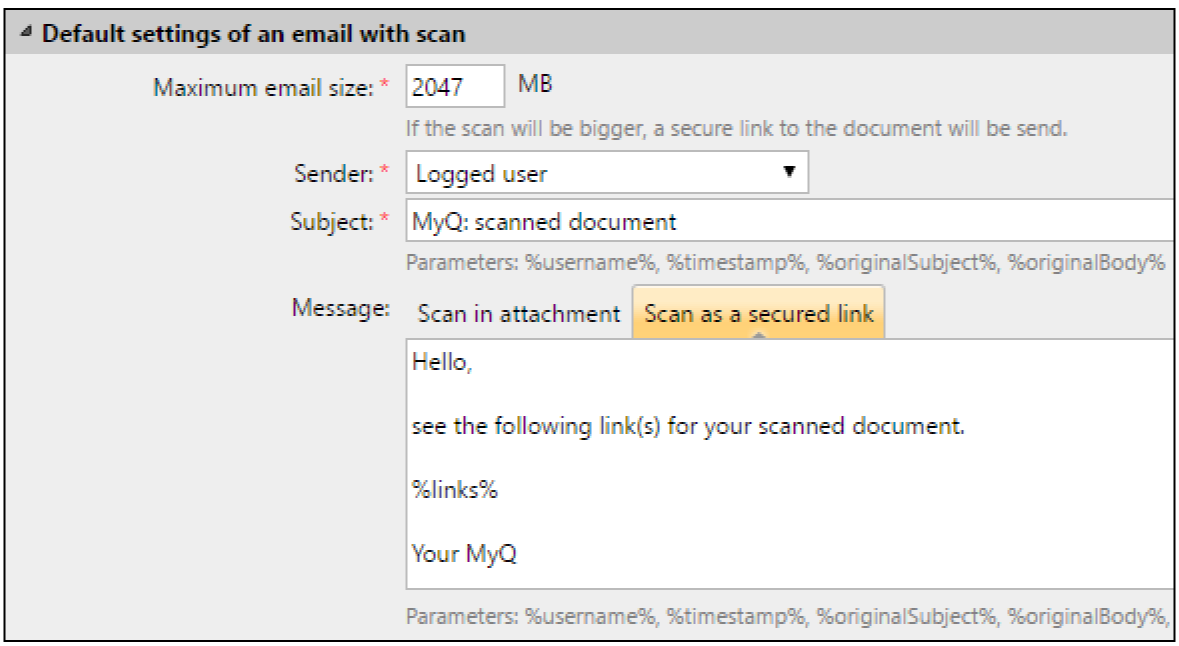


FIGURE 13.5. The **Maximum email size** setting and the **Scan as a secured link** text box on the **Scanning&OCR** settings tab

Due to email size restrictions of some email servers, users might not be able to send scans exceeding a certain size to their emails. To prevent such situations, you can set the maximum size of emails with scans on the MyQ Web Interface. Emails exceeding the limit are then replaced by emails with a secured link to the scan file, which is saved on the MyQ print server.

Maximum email size	Sets the maximum limit of the email with scan.
Scan as a secured link	Edit the body of the email with the secured link to the scan file. You can use multiple parameters, such as name of the sending user. The **%links%** parameter represents the actual link to the stored scan file.

INFO: Select **System management**- **History** to set the period after which the scan files are deleted. For further information about the MyQ history settings, see *"Changing MyQ History settings"* on page 60.

25.3. Optical Character Recognition (OCR)

Optical Character Recognition is a complementary service that converts scanned documents to a searchable and editable format, such as an MS Word document or a searchable PDF. To provide this functionality, you can either use the MyQ OCR (Optical Character Recognition) server, which might be purchased as a part of the MyQ solution, or you can employ a third-party application.

The following two sections describe setup of the feature on the MyQ server.

INFO: For information on how to purchase the MyQ OCR server, please contact the MyQ sales department.

25.3.1. Activation and setup of the feature

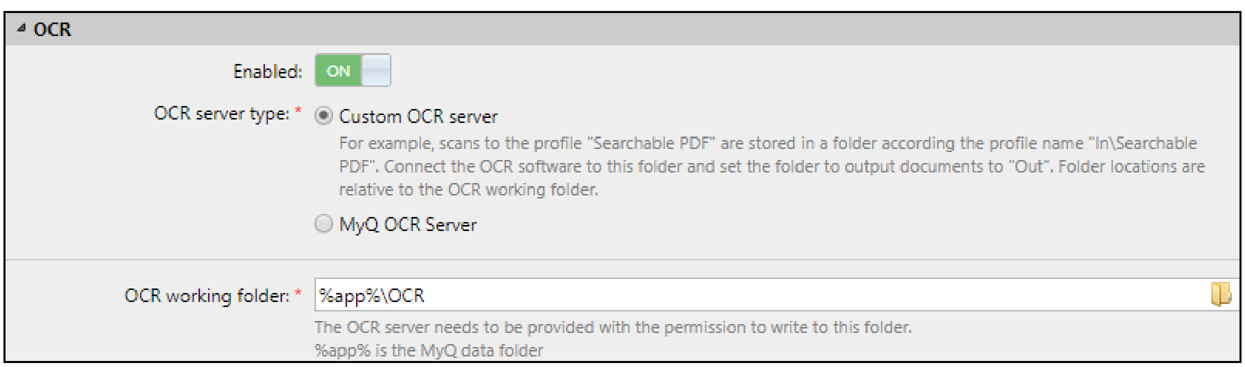


FIGURE 13.6. The General section and the OCR section of the **Scanning & OCR** settings tab

The OCR feature has to be enabled on the **Scanning & OCR** settings tab, under OCR.

On the **Scanning & OCR** settings tab, under OCR, you can change the folder, where the scanned data is sent. However, we recommend you not to change the default folder (*C:\ProgramData\MyQ\OCR*).

The OCR folder contains two sub-folders: **in** and **out**. In the **in** folder, the scanned documents are stored before being processed. In the **out** folder, the processed documents are saved by the OCR software and ready to be sent.

NOTICE: A document sent to be processed by OCR is received with a certain delay depending on the OCR software speed and size of the document.

NOTICE: Running the OCR software on the same production server as the MyQ service may affect your system performance.

25.3.2. OCR processing

To send the scanned document to OCR, the entered receiver email address has to be in the form: **myqocr.*folder*@myq.local**, where ***folder*** is the folder where the document is saved before it is proceeded by the OCR software, for example DOC or PDF. If the folder is not there, MyQ will create it.

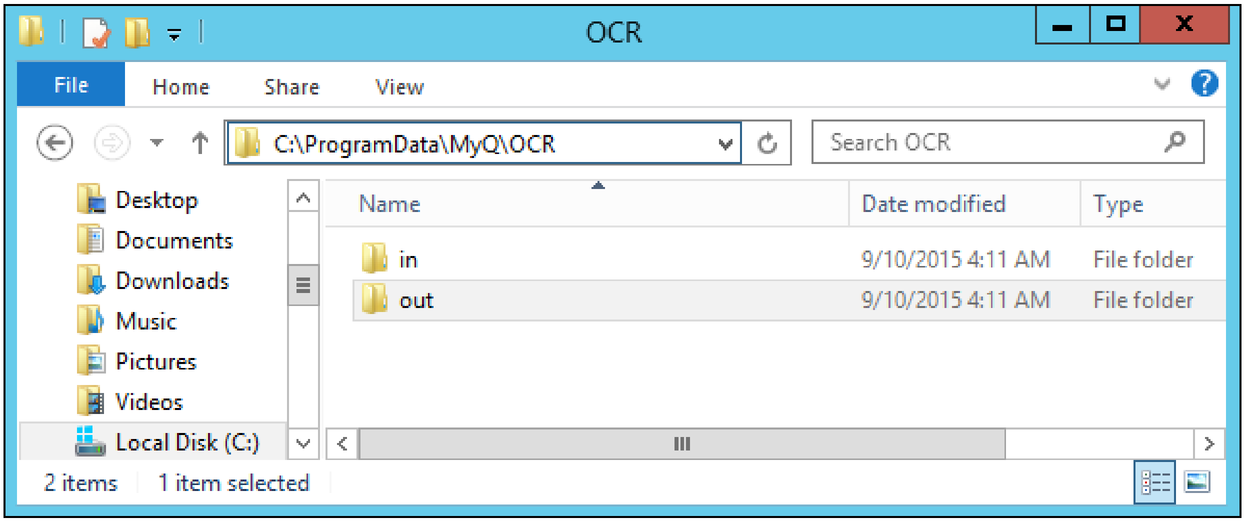


FIGURE 13.7. The OCR folder under MyQ Data folder

The OCR software should listen to the document sub-folders of the **in** folder (**in\doc**, **in\txt**,...), process the file sent there, save the converted document to the **out** folder and delete the source file from the **in*folder*** folder.

MyQ listens to the **out** folder, sends the converted file to the user and deletes it from the folder.

INFO: The converted file is sent to the folder or email address listed in the **User's scan storage** text box on the user properties panel.

NOTICE: The file sent to the **out** folder by the OCR software has to have the same name as the source file in the **in***** folder. If the name of the converted file differs from the source file, it is deleted without being sent to the user.

25.4. Email commands table

email@myq.local	Sends the document to the user's primary email.
folder@myq.local	Sends the document to the folder or emails set in the **User's scan storage** text box on the user's properties panel.
myqocr.*folder*@myq.local	Send the document to the OCR service. ***folder*** is the folder where the document is saved before it is proceeded by the OCR software.
myqfwd-*email*	Any email sent from a printing device directly to MyQ is discarded if the device is not in the user session status. If you want to forward messages from a printing device activated on the MyQ server to some email address, you have to add the **myqfwd-** prefix. *email* is the email address where MyQ forwards the sent mail. For example, if you want to forward messages to **admin@domain.com** address, you have to set the address as **myqfwd-admin@domain.com**.

INFO: Messages sent to **myqfwd-*email*** from printing devices that are not activated in MyQ are discarded.

26. Credit

With the credit accounting feature activated, users can copy, print and scan only if they have enough credit on their account in MyQ. Printing is allowed only for print jobs that do not exceed the credit and copying is terminated immediately after the credit is exceeded. The credit system can be restricted to selected users and groups.

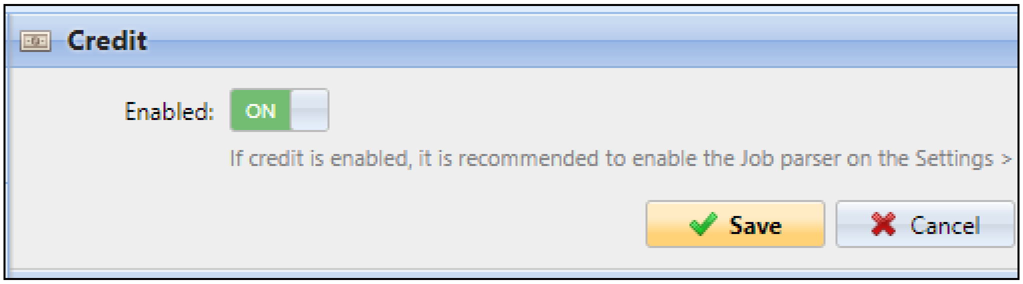


FIGURE 13.8. **Credit** settings tab

Users can view the current amount of credit on their accounts on the MyQ Web Interface and in the MyQ mobile application. If a printing device is equipped with an embedded terminal or a reader with an LCD display, the logged users check the current state of their credit there and are allowed to select only those jobs that do not exceed their credit.

Based on the setup and properties of the printing environment, a variety of recharge methods may be employed. The MyQ administrator can manage the credit on the MyQ Web Interface, and also provide the users with the option to recharge the credit themselves on embedded terminals, on recharging terminals, in the MyQ mobile application, via recharging vouchers, or via a third-party payment method.

The MyQ Administrator (and authorized MyQ users) can also reset the credit to a specific amount on the MyQ Web Interface.

NOTICE: For proper functioning of the credit accounting, it is necessary to set prices for particular functions (print/copy/scan – B&W/color) on each printer and to use MyQ parser to get the print job's metadata. For information on how to set prices and how to activate the MyQ parser, see Price List and Jobs.

26.1. Activation and setup of the Credit accounting

The activation and setup of the credit accounting is managed on the Credit settings tab. To open this tab, click **MyQ**, then click **Settings**, and lastly click **Credit**.

To set up the credit accounting, follow these steps:

1) Enable credit accounting on the Credit settings tab.

At the top of the tab, switch the **Enabled** option to **ON**, and then click **Save**.

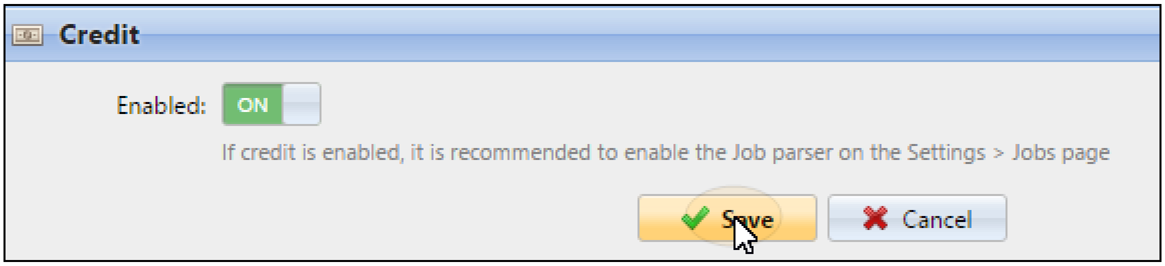


FIGURE 13.9. Enabling the credit accounting

2) Activate credit for a user or for a group of users.

Under **Users and Groups**, click **+Add item**. A new item appears on the list of users and groups on the **Credit** settings tab.

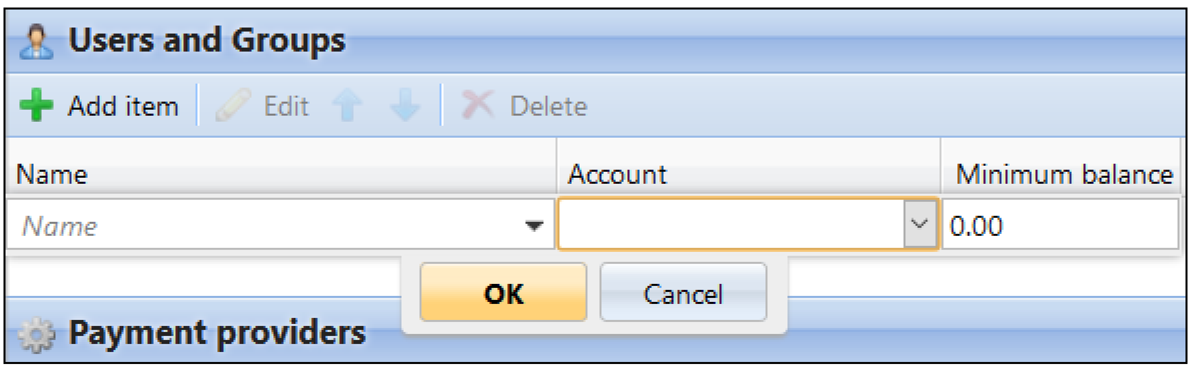


FIGURE 13.10. Adding new credit item to the list

a. Select a **Name** from the drop-down list:

b. Select an **Account** from the drop-down list.

c. Set the minimal balance.
Users cannot print, copy or scan if their credit is below this number.

Click **OK** to save the settings.

3) Under Payment providers, you can enable or disable the methods of payment for the credit recharge:

- Recharge Credit (on a terminal attached to a printer)
- Voucher
- PayPal
- External Payment Provider
- WebPay
- Recharge Terminal
- CASHNet
- TouchNet uPay
- SnapScan

To enable any of these options (if disabled), select the **Internal account** / **Option** in the **Payment providers** section, and then click **Enabled** on the bar at the top of the section (or right-click the item, and then click **Enabled** on the shortcut menu).

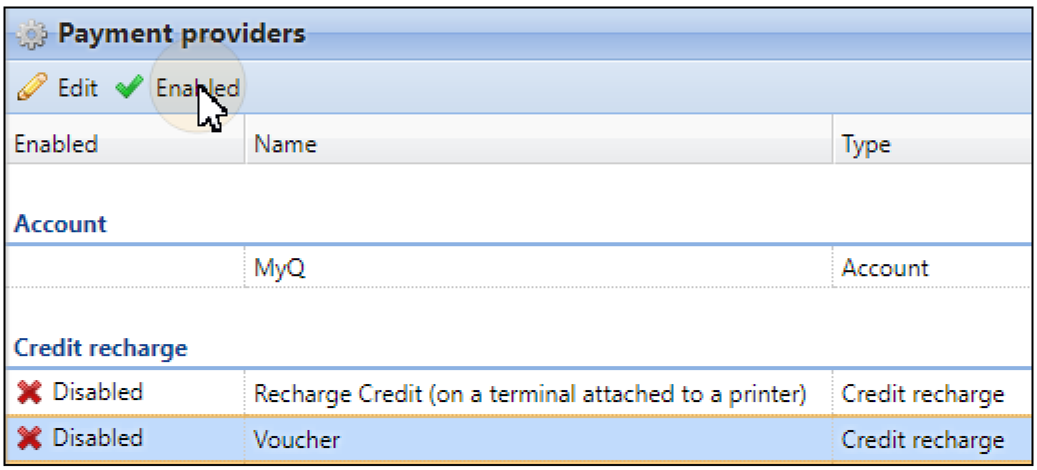


FIGURE 13.11. Payment providers overview

NOTICE: For information about external recharge terminals and about external payment providers, contact MyQ support.

26.2. Manual recharge of users' credit on the MyQ Web Interface

The administrator (and users authorized to recharge credit) can manually recharge the credit of each user to a specific value. This can be done either on the **Credit Statement** main tab, or on the **Users** main tab of the MyQ Web interface.

On the **Credit Statement** tab, you first open the credit recharge action, and subsequently select the users and groups to recharge the credit to.

On the **Users** tab, you first select the users or the group, and then recharge their credit.

INFO: Users' credit can be reduced by entering a negative number in the recharge credit dialog box. By entering **-100**, the credit is decreased by 100.

26.2.1. Providing users with the rights to recharge credit

By default, the only person who can recharge the credit is the administrator. However, the administrator can authorize a MyQ user to recharge the credit as well. The user needs to be provided with the rights to access the credit settings and to recharge the credit. This is done on the **Rights** settings tab of the MyQ Web Interface.

INFO: For more information about how to manage rights in MyQ, see Rights.

To authorize a user to recharge credit on the **Credit Statement** tab, you need to provide them with the right to **Recharge credit**.

To authorize a user to recharge credit on the **Users** tab, you need to provide them with the right to **Recharge credit** and the right to **Manage Users**.

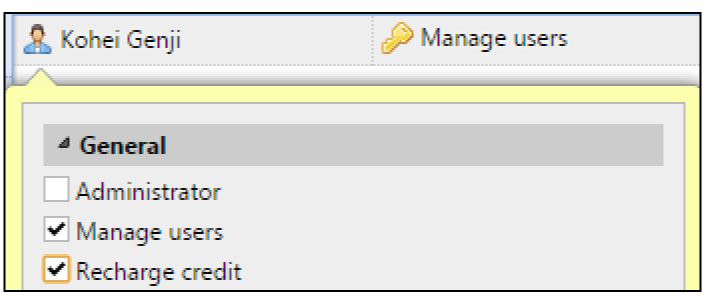


FIGURE 13.12. Authorizing users to recharge credit on the **Users** tab

The authorized user can recharge the credit on their MyQ Web interface in the same way as the MyQ administrator.

26.2.2. Recharging credit on the Credit Statement tab

On the **Credit Statement** tab, you can overview the changes in the credit balance of MyQ users, and also recharge credit to users and groups. To open the tab on the MyQ Web Interface, click **MyQ**, and then click **Credit Statement**.

To recharge credit to users or groups, do the following:

1. Click **Recharge Credit**. The **Recharge Credit** dialog box appears on the tab.

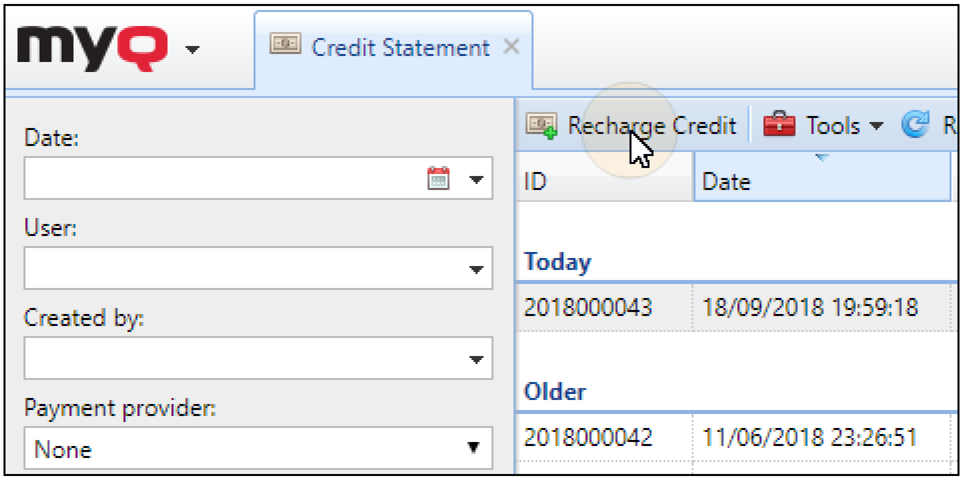


FIGURE 13.13. Opening the **Reset Credit** options

2. In the dialog box, either enter an ID of a user's card, or select the users and groups to recharge the credit to, then enter the amount to be recharged, and lastly click **Recharge Credit**.

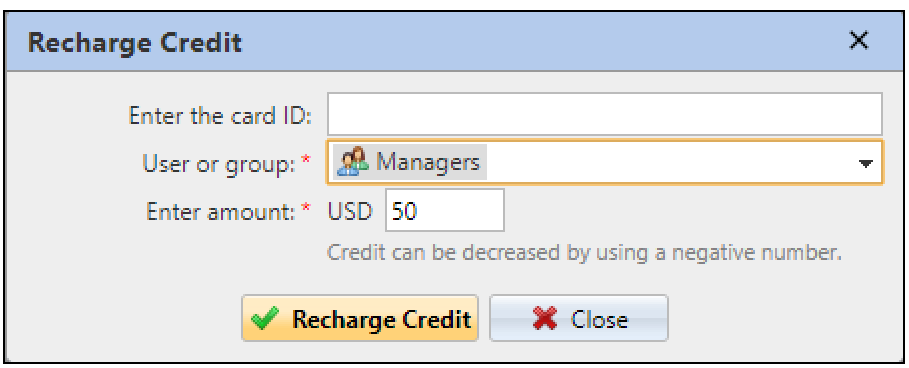


FIGURE 13.14. Setting the recharge in the **Recharge Credit** dialog box

26.2.3. Recharging credit on the Users main tab

To open the **Users** main tab on the MyQ Web Interface, click **MyQ**, and then click **Users**.

Recharge credit to selected users

1. Select the users.

2. Click **Actions**.

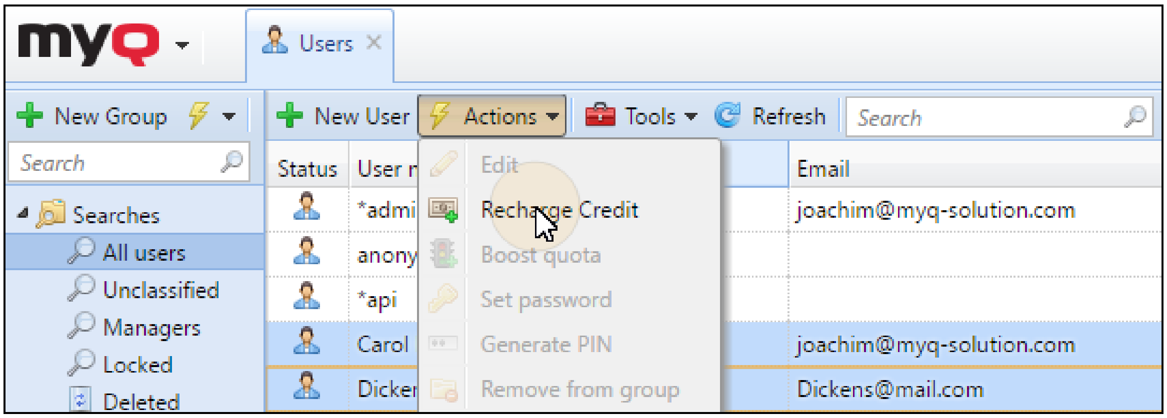


FIGURE 13.15. Recharging credit in the **Actions** drop-down menu on the **Users** main tab

3. Click **Recharge credit** in the **Actions** drop -down list. The **Recharge Credit** dialog box opens.

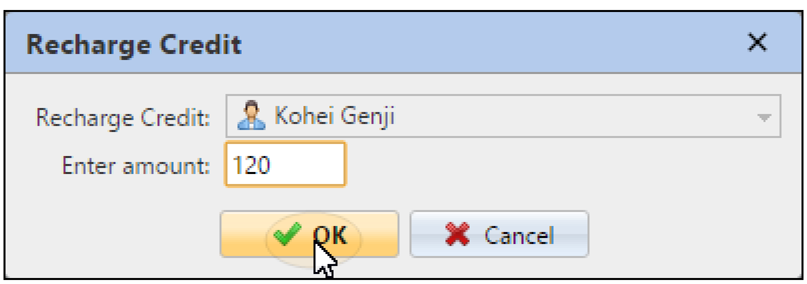


FIGURE 13.16. Entering the credit in the **Recharge Credit** dialog box

4. Enter the amount to be recharged, and then click **OK**. The credit is increased by the specified amount.

Recharge credit to a group of users

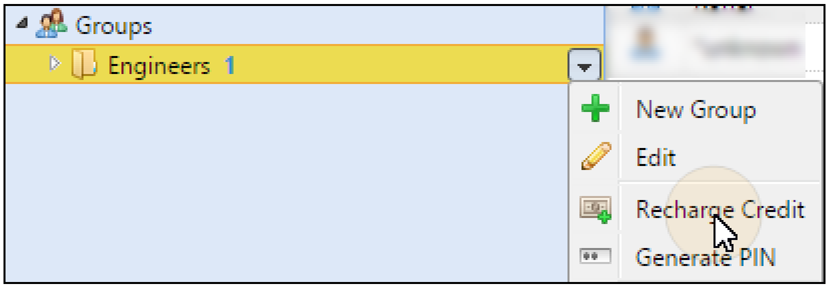


FIGURE 13.17. Recharging credit to a group

1. In the panel on the left side of the **Users** main tab, right-click the group, and select **Recharge Credit**. The **Recharge Credit** dialog box appears.

2. In the dialog box, enter the amount and click **OK**. The credit is increased by the specified amount.

26.3. Recharging credit by vouchers

The MyQ administrator (and users authorized to manage vouchers) can generate and print any number of vouchers of a defined value to be distributed to users.

The vouchers can be sold to MyQ users through any standard distribution channel. Once the user has the credit voucher, they can recharge their credit on their account on the MyQ Web Interface, on embedded terminals, on MyQ TerminalPro terminals and in the MyQ mobile application.

> **NOTICE:** All generated and used vouchers are logged in MyQ database. The information about which voucher was used for which user can be accessed on the MyQ web interface. This ensures full control and enables the administrator to prevent possible misuse. See *"Controlling vouchrs usage "* on page 346.

26.3.1. Setting the voucher format code

Before the vouchers are generated, it is necessary to set the format of the voucher unique code and define the text printed on the voucher. These parameters can be set and modified on the **Credit** settings tab, under **Payment providers**, under **Internal account**. Double-click the **Voucher** item (or select the item and click **Edit**) to open the **Voucher** properties panel.

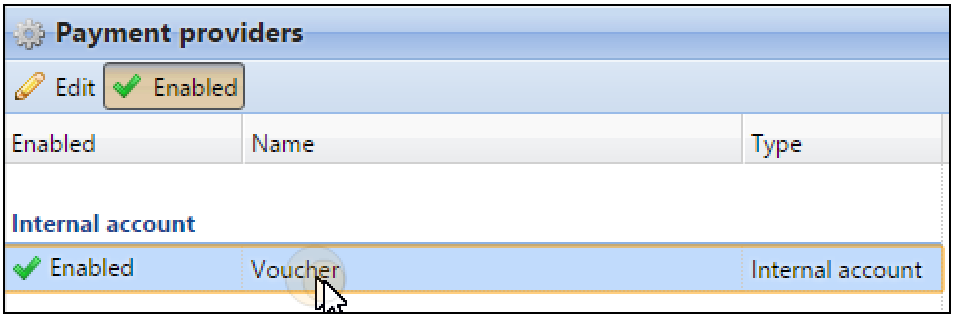


FIGURE 13.18. Opening the **Voucher** properties panel on the **Credit** settings tab

The unique code format can be defined by creating a code mask – predefined code template consisting of zeroes and lower case a's. Zeroes are substituted by numbers and a's are substituted by upper case letters or numbers. For example, the **00a0000aaa** mask will generate numbers such as 86D9841POE, 03E8976E67 etc.

NOTICE: Always set the code format adequate to the number of users and the frequency of voucher generating process, to ensure a sufficient variety of codes. If the amount of the currently valid codes is large and the variety not sufficient, the chance of randomly guessing the valid code number is high and the credit system can be easily bypassed.

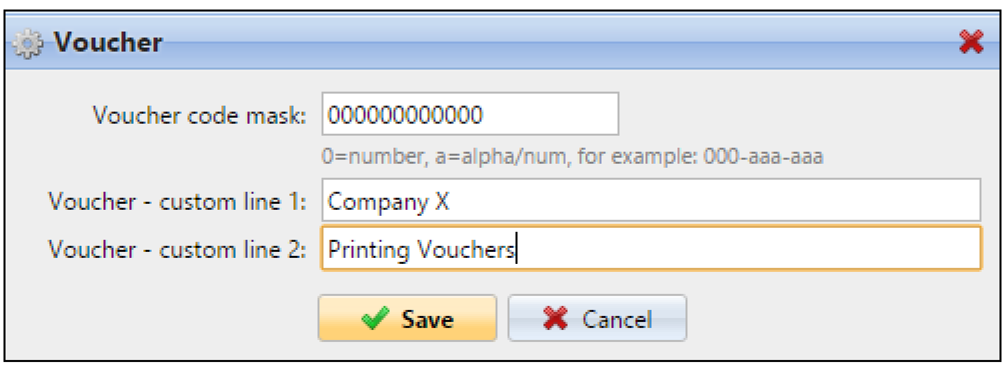


FIGURE 13.19. Editing vouchers on the **Voucher** properties panel

The text entered in the custom lines 1 and 2 is displayed on the printed vouchers. You can enter name of your company and additional information.

NOTICE: Do not forget to set the currency on the **General** settings tab, if you have not set it earlier. The currency on the printed voucher is the same as the one set in MyQ.

26.3.2. Importing a custom logo for Credit Vouchers

If you want to use your own logo on MyQ credit vouchers instead of the default MyQ logo, you can import the new logo on the Personalization settings tab of the MyQ Web Interface.

The file with the logo has to be in the *JPG, JPEG, PNG* or the *BMP* format; the recommended size of the logo is **398px** x **92px**.

To import the logo:

1. On the MyQ Web interface, open the **Personalization** settings tab. (At the top-left corner, click **MyQ**, then click **Settings**, and then click **Personalization**).

2. On the tab, under **Custom application logo**, click **+Add**, then find and upload the file with the logo, and lastly click **Save** at the bottom of the tab. A preview of the new logo is displayed on the tab.

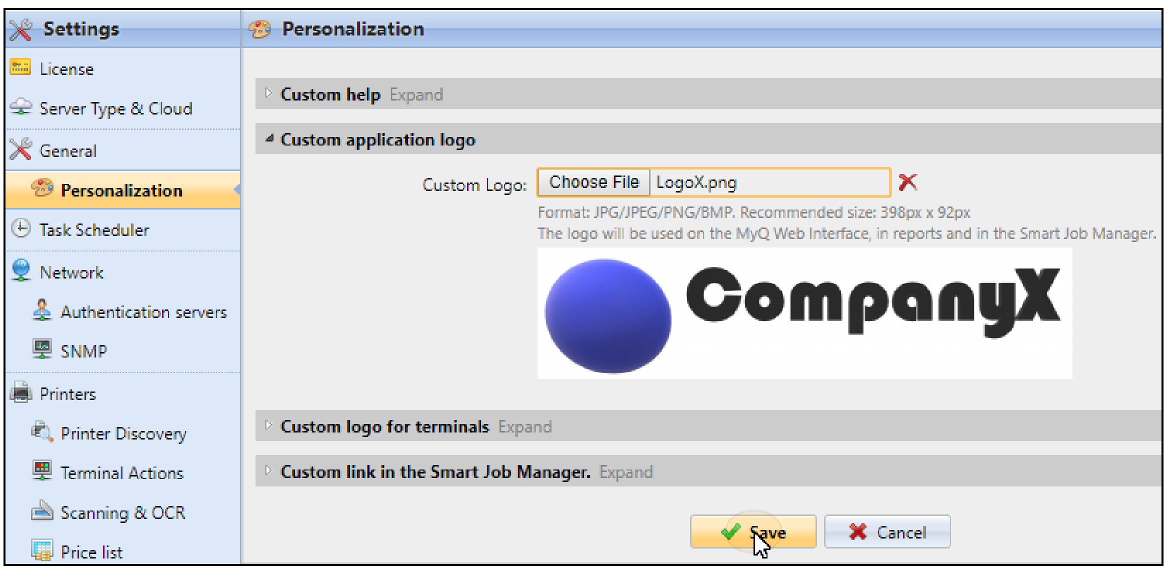


FIGURE 13.20. Uploading the file on the **Reports** settings tab of the MyQ Web Interface

26.3.3. Providing users with the right to manage vouchers

To enable users to manage vouchers on the **Voucher Batches** main tab, provide them with the **Manage Vouchers** rights.

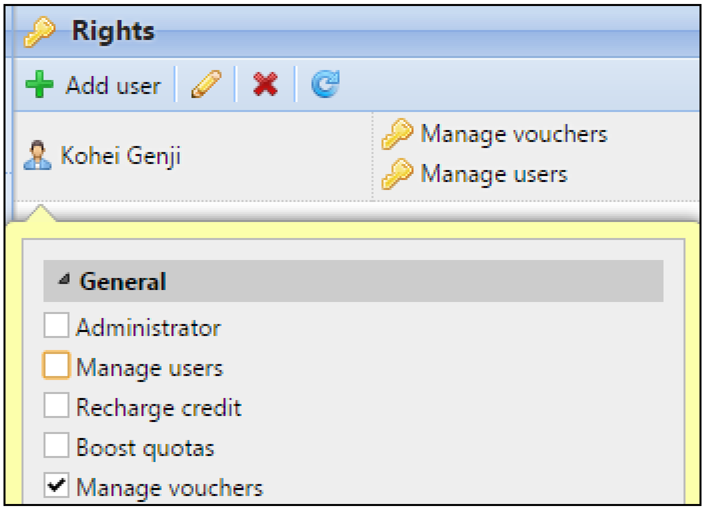


FIGURE 13.21. Selecting the right on the **Rights** settings tab

INFO: For more information about rights and how to provide them, see Rights .

26.3.4. Generating new vouchers

Vouchers can be generated on the **Voucher Batches** tab of the MyQ Web Interface. To open this tab, click **MyQ**, and then click **Voucher Batches**.

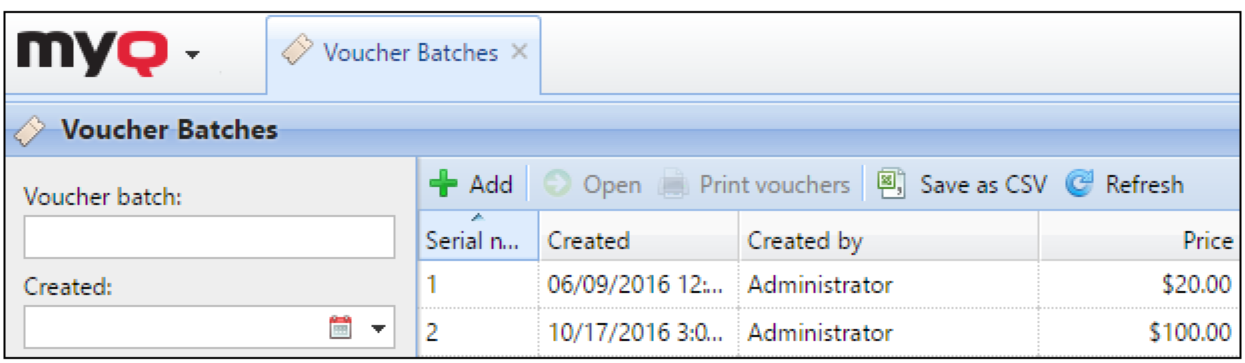


FIGURE 13.22. **Voucher Batches** main tab

To generate new vouchers:

1. On the bar at top of the **Voucher Batches** tab , click **+Add**. The **New Voucher Batch** dialog box appears.

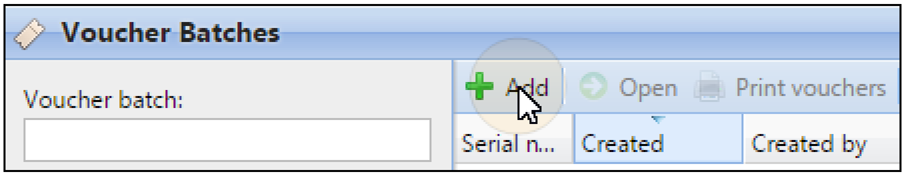


FIGURE 13.23. Adding a new voucher batch on the Voucher Batches main tab

2. In the dialog box, enter the number of vouchers to be generated, nominal price of the vouchers in the batch, validity period, and then click **OK**. The new voucher batch record is displayed in the voucher batches list. You can overview all of the vouchers by double-clicking this record.

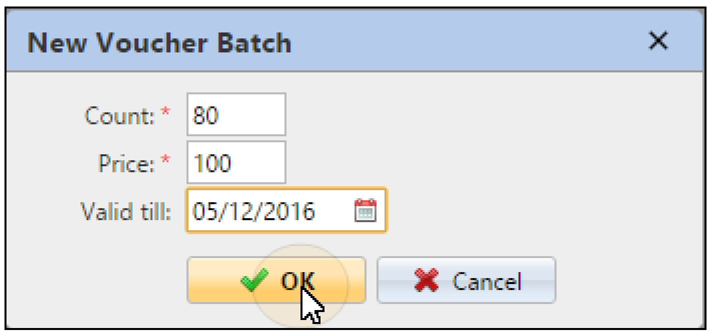


FIGURE 13.24. Setting the new voucher batch

26.3.5. Managing Voucher Batches

Voucher batches can be filtered by serial number, date, creator, price and expire date. From the **Voucher Batches** main tab, you can export the list of voucher batches to CSV, display and print vouchers included in particular batches.

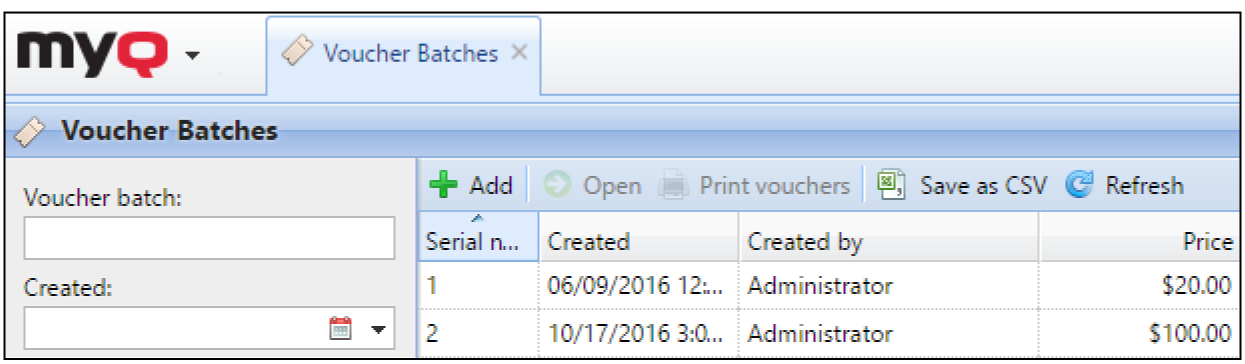
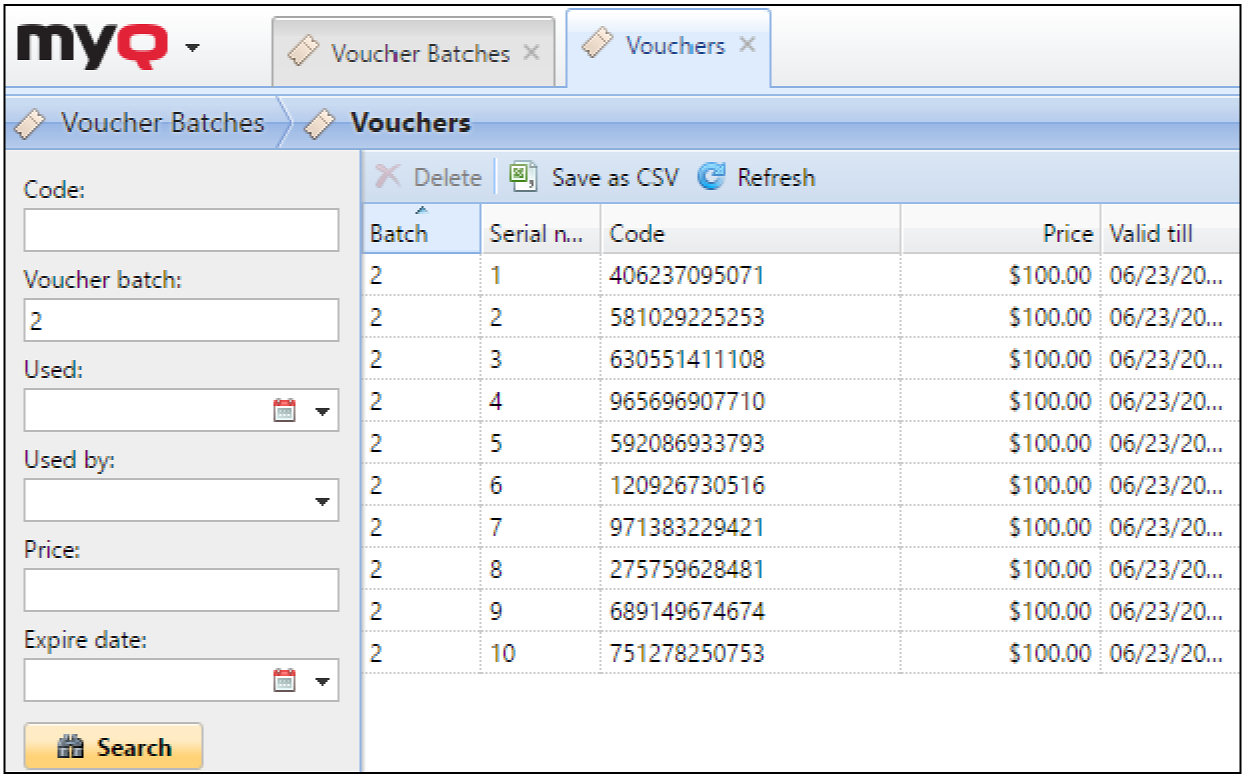


FIGURE 13.25. Options on the **Voucher Batches** main tab

26.3.6. Controlling vouchrs usage

To open the table of all the vouchers generated in one batch, double-click the batch on the **Voucher Batches** main tab (or select the batch, and then click **Open** on the bar at the top of the tab).



Batch	Serial n...	Code	Price	Valid till
2	1	406237095071	$100.00	06/23/20...
2	2	581029225253	$100.00	06/23/20...
2	3	630551411108	$100.00	06/23/20...
2	4	965696907710	$100.00	06/23/20...
2	5	592086933793	$100.00	06/23/20...
2	6	120926730516	$100.00	06/23/20...
2	7	971383229421	$100.00	06/23/20...
2	8	275759628481	$100.00	06/23/20...
2	9	689149674674	$100.00	06/23/20...
2	10	751278250753	$100.00	06/23/20...

FIGURE 13.26. Vouchers overview on the **Vouchers** tab

In the table, you can see records of all of the generated vouchers with information such its unique code, price, validity, the current status of the voucher usage etc. If the number of records is too high to be displayed clearly, you can filter them by using filters on the left side. Vouchers can be filtered by code, voucher batch, price etc.

To delete a voucher, select it in the table and click **Delete** on the bar at the top of the tab.

NOTICE: When you delete a voucher, the code on the voucher becomes invalid.

Delete | Save as CSV | Refresh

Batch	Serial number	Code	Price	Valid till	Used	Used by	Deleted
3	1	14T8283LV	120.00	20/02/2...	–		–
3	2	62M7574HM	120.00	20/02/2...	–		–
3	3	13H125954	120.00	20/02/2...	01/12/20...	Kohei Genji	–
3	4	~~2270455LX~~	120.00	20/02/2...	–		01/12/2015 00:...
3	5	~~25D4530RO~~	120.00	20/02/2...	–		01/12/2015 01:...

FIGURE 13.27. Information about vouchers that are displayed on the **Vouchers** tab overview

26.4. Recharging credit via PayPal

Another way of recharging credit in MyQ is to let users directly buy the credit via PayPal on their accounts on the MyQ Web interface.

NOTICE: A PayPal Business account is required to receive the payments.

NOTICE: The currency used on the PayPal account of the paying users has to match the currency set on the MyQ server. In case someone pays in a different currency, the payment does not go through and stays in pending transactions of the receiving PayPal account. In order to receive the payment, the administrator has to approve the transaction on the PayPal account. After this, the credit must to be manually recharged on the MyQ server as the information about the payment is not sent to MyQ.

26.4.1. Setting up the PayPal payment option

All you need to do is to create a new App to link your company's PayPal business account with MyQ, and then set up the PayPal payment option on the MyQ Web Interface.

1) Create a new REST API app in the PayPal Developer environment

I. Log in to the PayPal Developer environment (https://developer.paypal.com/) with your PayPal Business account's credentials, and then open the **Dashboard**.

II. On the **Dashboard**, under **MyApps & Credentials**, create a new REST API app. The new app's settings tab opens.

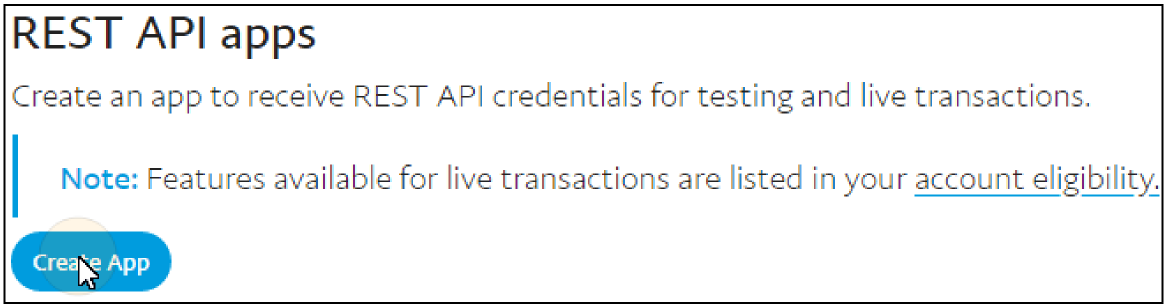


FIGURE 13.28. Creating the new REST API app on the PayPal Business account.

III. Select **Live** at the upper-right corner of the tab, and remember (copy) the app's **Client ID** and **Secret**. The credentials will be used to connect the account to MyQ.

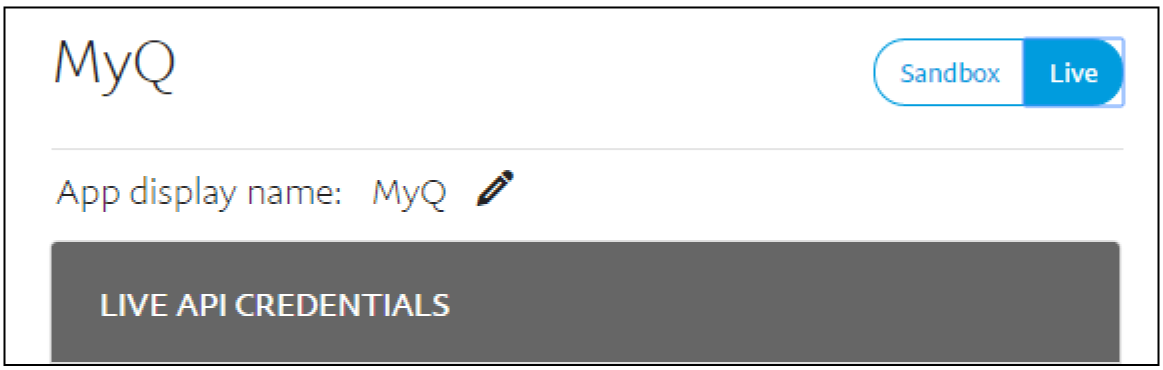


FIGURE 13.29. Creating the new REST API app on the PayPal Business account.

INFO: You can name the app anything you wish, as the name does not play any role within the setup.

2) Set up the PayPal payment option on the MyQ Web Interface

I. Open the **Credit** settings tab (**MyQ, Settings, Credit**).

II. On the tab, under **Payment providers**, double-click the **PayPal** payment provider. The **PayPal** properties panel opens on the right side of the tab.

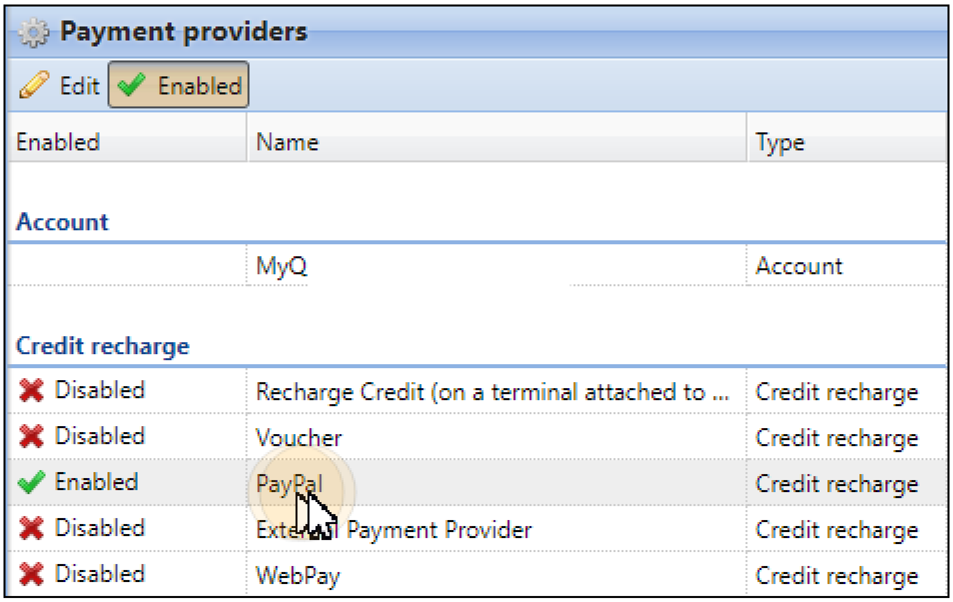


FIGURE 13.30. Opening the PayPal properties panel

III. The value of the **Currency** setting corresponds to the currency set on the **General** settings tab on the MyQ Web Interface.

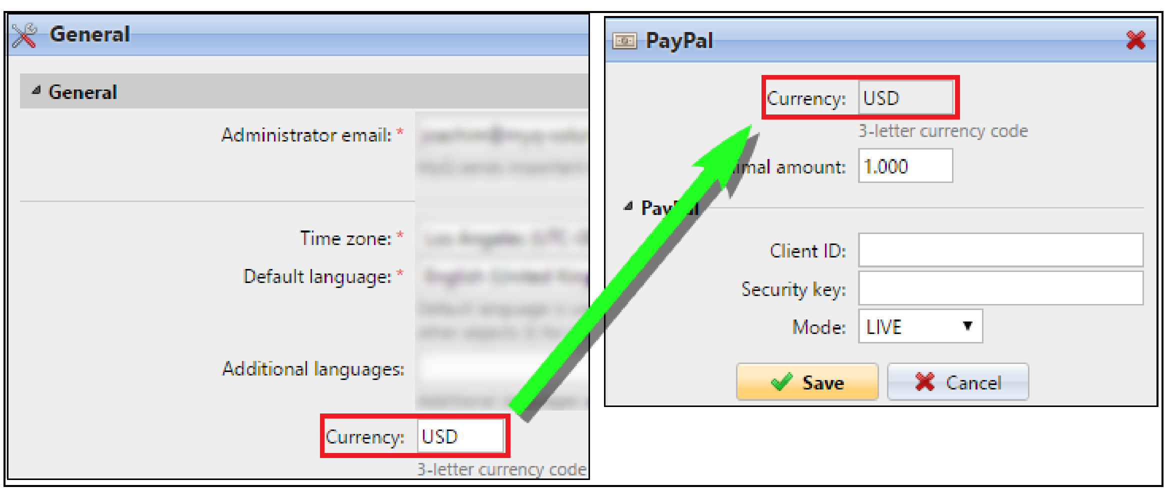


FIGURE 13.31. The currency selected on the General settings tab applies to the PayPal payments option.

IV. Type the minimal amount that users will have to pay when they buy credit.

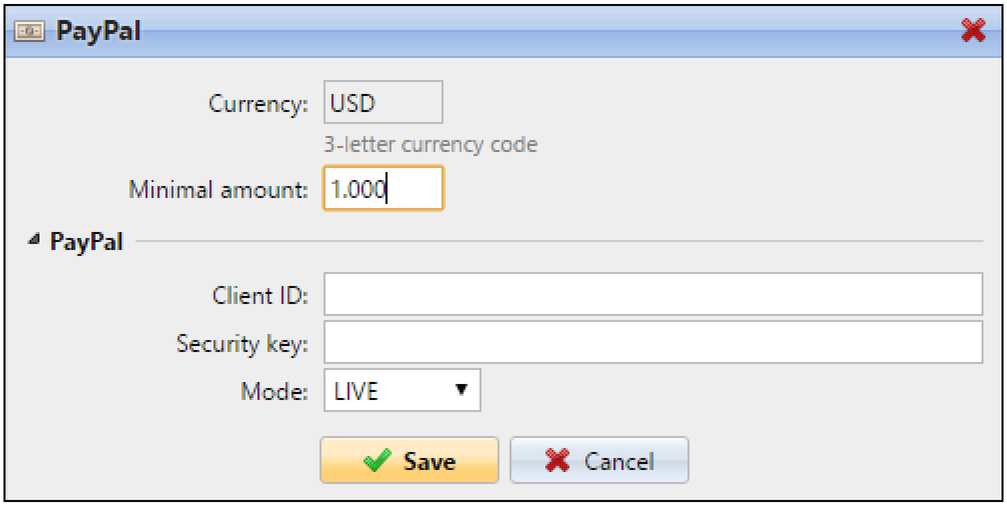


FIGURE 13.32. The credentials of the previously created app need to be entered in MyQ

V. Enter the **Client ID** of the REST API app into the **Client ID** text box on the PayPal properties panel and the **Secret** into the **Security key** text box below it.

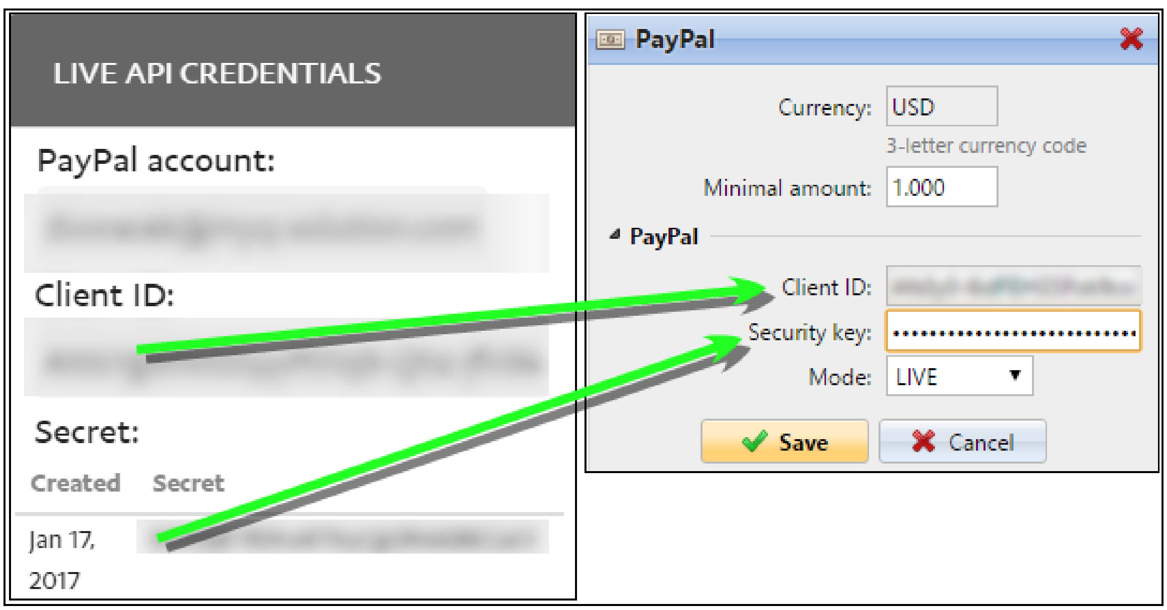


FIGURE 13.33. The credentials of the previously created app need to be entered in MyQ

VI. Make sure that the **LIVE** mode is selected, and then click **Save**. (The **SANDBOX** mode is used only for testing purposes.)

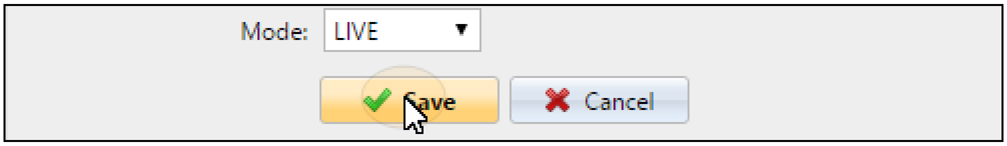


FIGURE 13.34. Saving the PayPal settings.

26.4.2. Recharging credit via PayPal on the user's account on the MyQ Web Interface

First of all, the user needs to log in to their account on the MyQ Web Interface.

To recharge the credit there, the user has to click **Recharge credit** under **Credit**. The **Recharge credit** dialog appears.

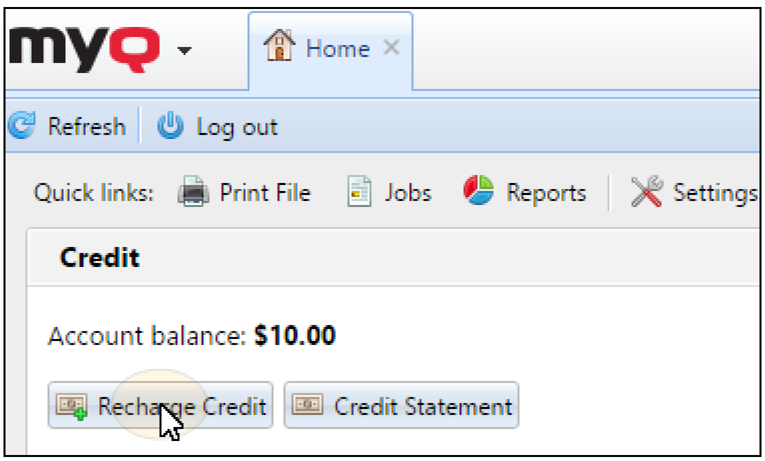


FIGURE 13.35. Opening the Recharge Credit dialog box

In the dialog box, the user has to select the **PayPal** payment provider, enter the amount of credit that they want to buy, and then click **Recharge Credit**.

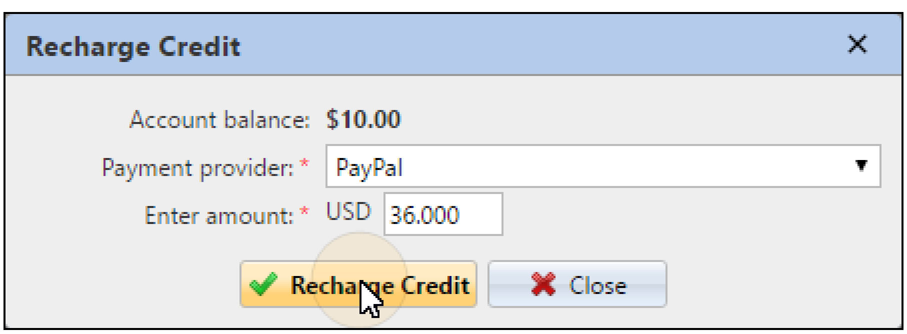


FIGURE 13.36. Recharging credit via the PayPal payment

A window with the PayPal payment options opens in the Web Browser; the rest of the steps correspond to the standard PayPal payment process.

After the payment is successfully sent to MyQ, the **Payment successful** dialog box appears.

NOTICE: PayPal tries to connect to the MyQ server via the hostname or IP address that is set on the **Network** settings tab of the MyQ Web Interface. In case a hostname is set on the tab and paying users receive the **"This site can't be reached / XYZ's server DNS address could not be found. / DNS_PROBE_FINISHED_NXDOMAIN "** message, try to replace the hostname with the IP address of your server.

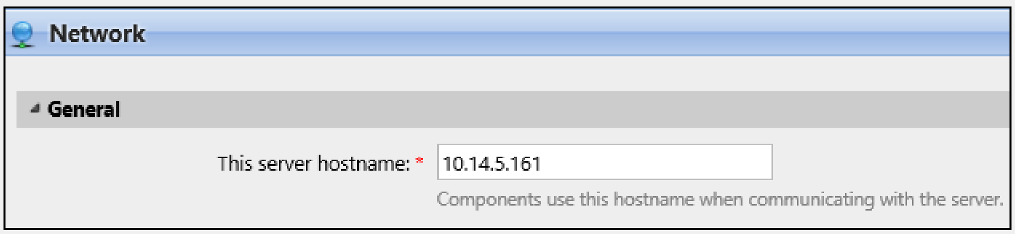


FIGURE 13.37. The information about the IP address of the MyQ server is taken from the **This server hostname** setting.

26.5. Recharging credit via WebPay

The WebPay payment gate enables customers to directly pay for their credit via a payment card or via a digital wallet. The following two sections show how to set up and use this payment option.

26.5.1. Setting up the WebPay payment option

You need to have a WebPay account, get a public and a private key; the public key has to be uploaded to the WebPay server and the private one needs to be uploaded to MyQ. Also, you need to remember/copy the password of the private key.

You can either use your own keys (with a help of the WebPay documentation) or use the WebPay tools to create new ones.

MyQ needs the following data:

- **Merchant number**: The Merchant number can be found on the WebPay portal, under **Key management**.

- **Private key**: The private key can be generated on the WebPay portal, under **Key Management**. It can be **.key**, **.pem** or **.crt**.
- **Private key password**: The private key password is the password that is provided to WebPay during generating of the private key or the passphrase used to create the private key manually.

To set up the WebPay payment option on the MyQ Web Interface, follow these steps:

I. Open the **Credit** settings tab. (At the top-left corner, click **MyQ**, then click **Settings**, and finally click **Credit**.)

II. On the tab, under **Payment providers**, right-click the **WebPay** payment provider, and then click **Edit** on the shortcut menu. The **WebPay** properties panel opens on the right side of the tab.

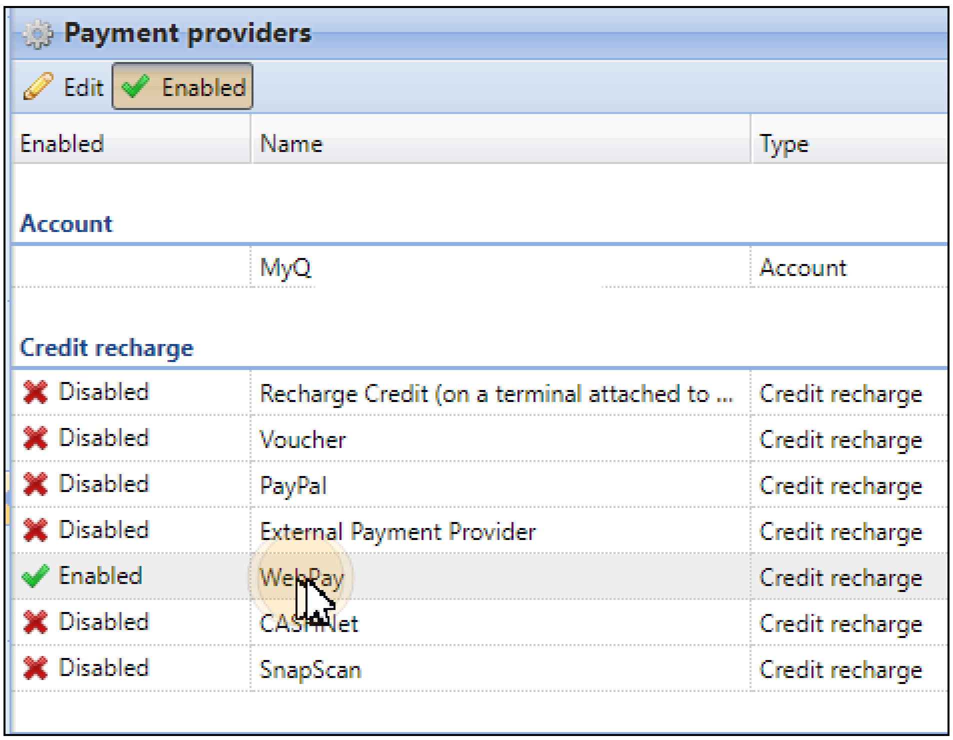


FIGURE 13.38. Opening the WebPay properties panel

III. The value of the **Currency** setting corresponds to the currency set on the **General** settings tab of the MyQ Web Interface.

FIGURE 13.39. The currency selected on the General settings tab applies to the PayPal payments option.

IV. Type the minimal amount that users will have to pay when they will buy credit.

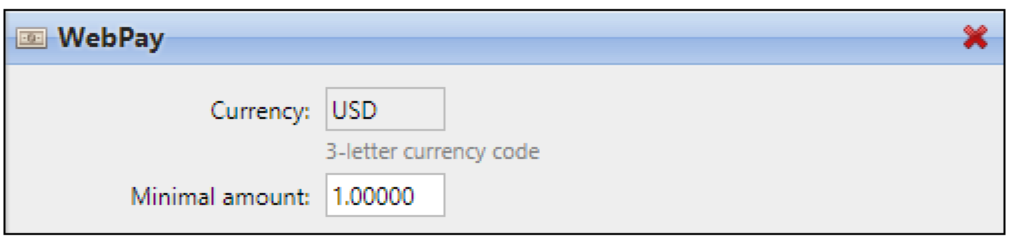


FIGURE 13.40. The credentials of the previously created app need to be entered in MyQ

V. Enter the **Merchant number** of the REST API app into the **Merchant number** text box and set **MODE** to **PRODUCTION**.

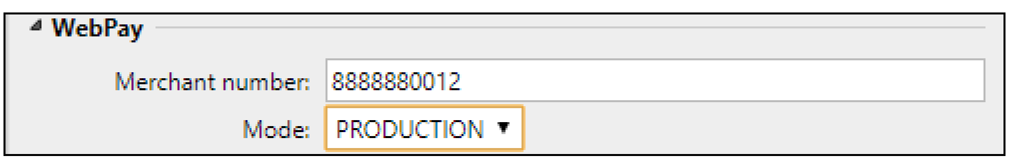


FIGURE 13.41. The credentials of the previously created app need to be entered in MyQ

VI. Upload the **Private key** from WebPay (click **Choose File**, select the file, and then click **Open**), enter the **Private key password** provided during generating of the private key, and then click **Save**.

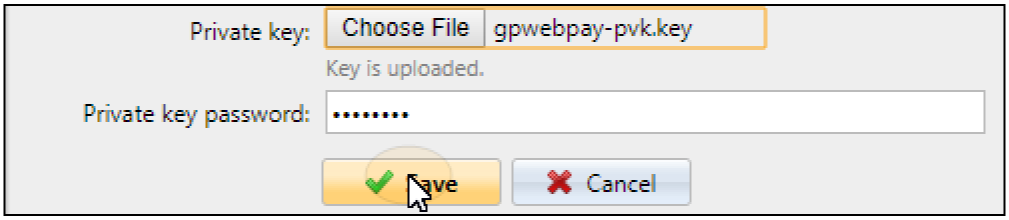


FIGURE 13.42. Saving the WebPay settings

26.5.2. Recharging credit via WebPay on the user's account on the MyQ Web Interface

First of all, the user needs to log in to their account on the MyQ Web Interface.

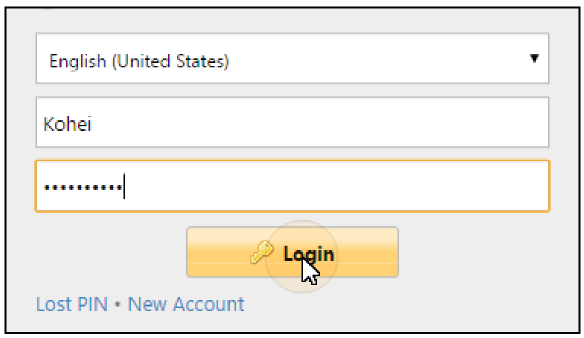


FIGURE 13.43. Logging in to the user's account

To recharge the credit there, the user has to click **Recharge credit** under **Credit**. The **Recharge credit** dialog appears.

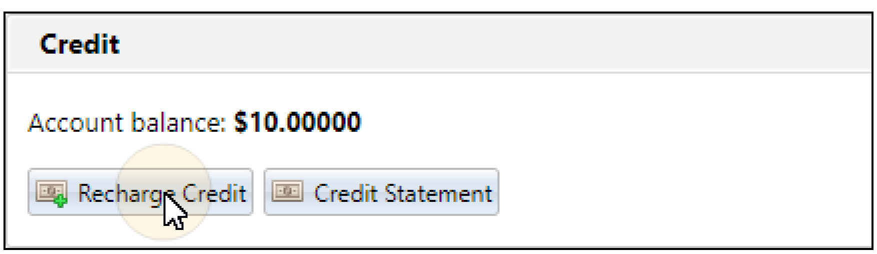


FIGURE 13.44. Recharging credit

In the dialog box, the user has to select the **WebPay** payment provider, enter the amount of credit that they wants to buy, and then click **Recharge Credit**.

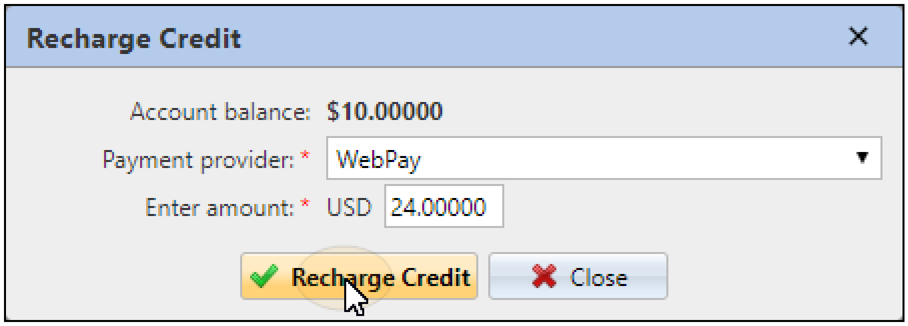


FIGURE 13.45. Recharging credit via WebPay

A window with the WebPay payment options opens in the Web Browser; the rest of the steps correspond to the standard WebPay payment process.

After the payment is successfully sent to MyQ, the **Payment successful** dialog box appears.

NOTICE: WebPay tries to connect to the MyQ server via the hostname or IP address that is set on the **Network** settings tab of the MyQ Web Interface. In case a hostname is set on the tab and paying users receive the **"This site can't be reached / XYZ's server DNS address could not be found. / DNS_ PROBE_FINISHED_NXDOMAIN "** message, try to replace the hostname with the IP address of your server.

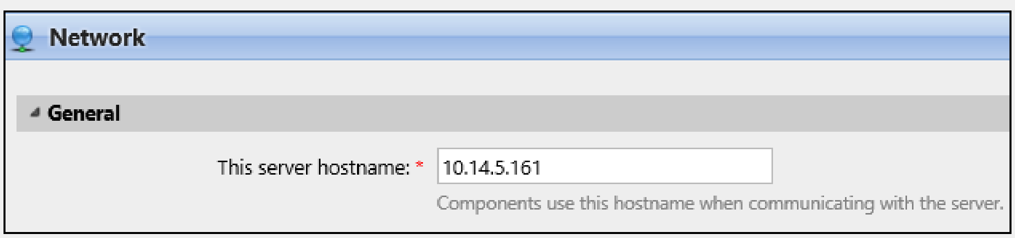


FIGURE 13.46. The information about the IP address of the MyQ server is taken from the **This server hostname** setting.

26.6. Recharging credit via CASHNet

The CASHNet payment gate enables customers to directly pay for their credit via a payment card or via a digital wallet. The following two sections show how to set up and use this payment option.

To be able to integrate the CASHNet payment gate into MyQ, you need to have a **Checkout** store created by the provider of the service. Also, you need to receive the following data:

- **Operator ID**, **Password**, **Station** and **Client Code** are necessary for login to the CASHNet Web User Interface

- **Merchant name**, **Station**, **Store URL** and **Item code** of the **Checkout** store are necessary for the integration into MyQ

26.6.1. Setting up the CASHNet payment option

1) Set up the eMarket store on the CASHNet Web User Interface

I. Log in to the CASHNet Web User Interface.

II. Open the **Store Setup** tab.

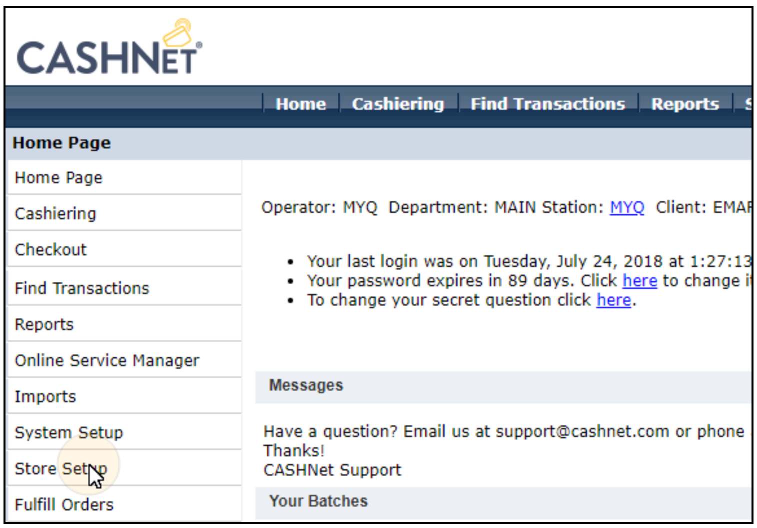


FIGURE 13.47. Opening the Store Setup

III. On the tab, click the dark blue button with the text **"Click here to use new eMarket store setup for Storefronts&Checkouts"**. The eMarket store setup page opens.

FIGURE 13.48. Opening the Store Setup

IV. On the page, double-click the Checkout store to open its setup page.

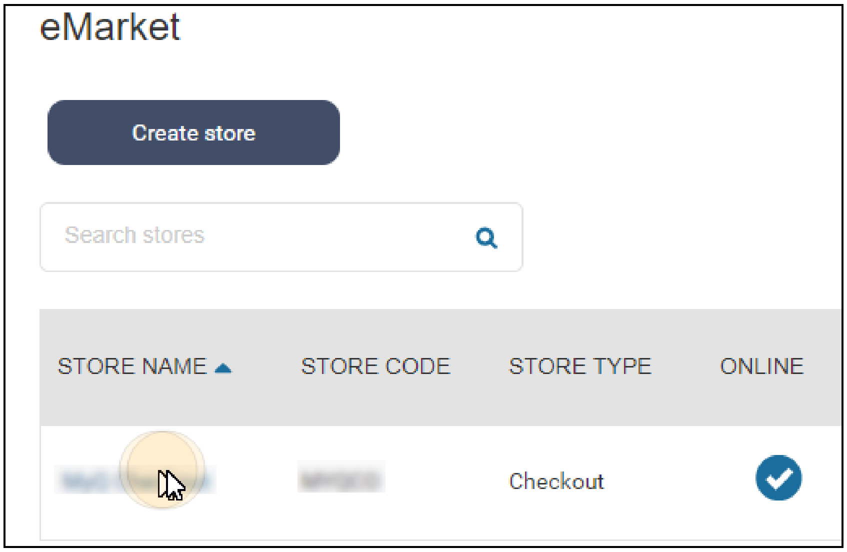


FIGURE 13.49. Opening the Store Setup

V. On the Checkout setup page, under **End of transaction behavior**, configure the following options:

- **Show receipt page**: disable
- **Use redirect URL(s)**: enable
- **Redirect URL for successful transactions & successful online post responses**: leave empty
- **Redirect URL for unsuccessful transactions or non-responsive online post attempts**: leave empty
- **Append data to the redirect URL**: set to **"Yes, and redirect using HTTP post"**

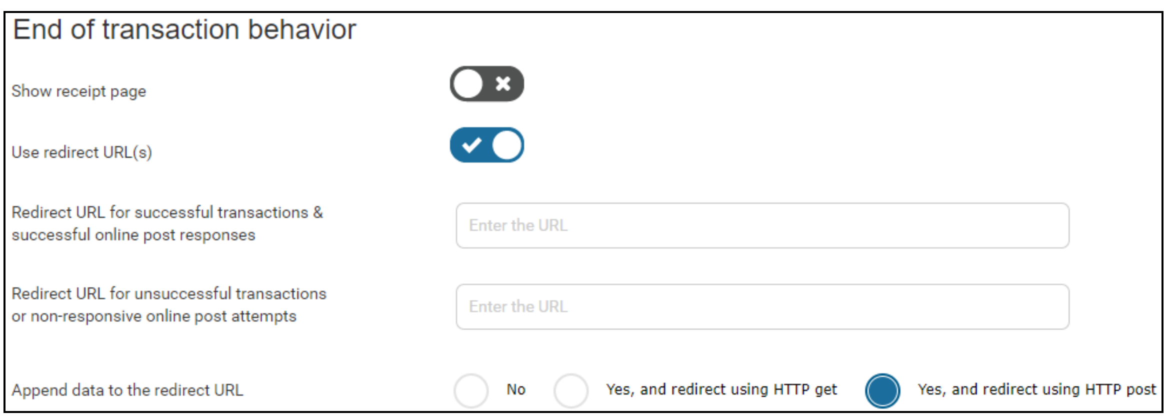


FIGURE 13.50. Opening the Store Setup

VI. Now you can leave the CASHNet Web User Interface.

2) Set up the CASHNet payment option on the MyQ Web Interface

I. Open the **Credit** settings tab. (At the top-left corner, click **MyQ**, then click **Settings**, and finally click **Credit**.)

II. On the tab, under **Payment providers**, double-click the **CASHNet** payment provider (or right-click the **CASHNet** payment provider, and then click **Edit** on the shortcut menu). The **CASHNet** properties panel opens on the right side of the tab.

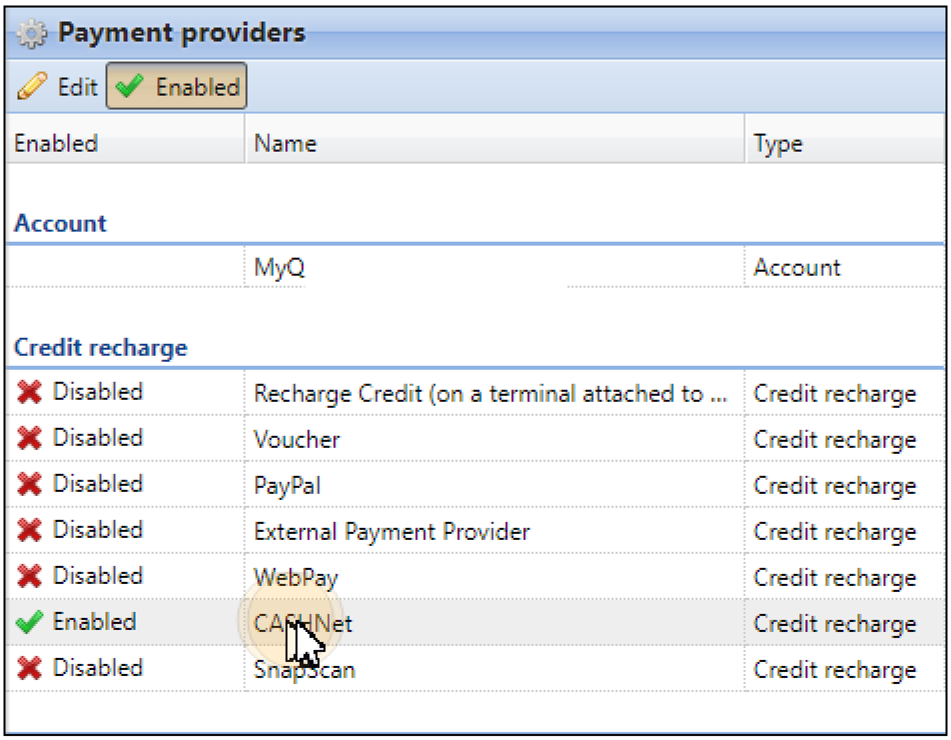


FIGURE 13.51. Opening the CASHNet properties panel

III. The value of the **Currency** setting corresponds to the currency set on the **General** settings tab of the MyQ Web Interface.

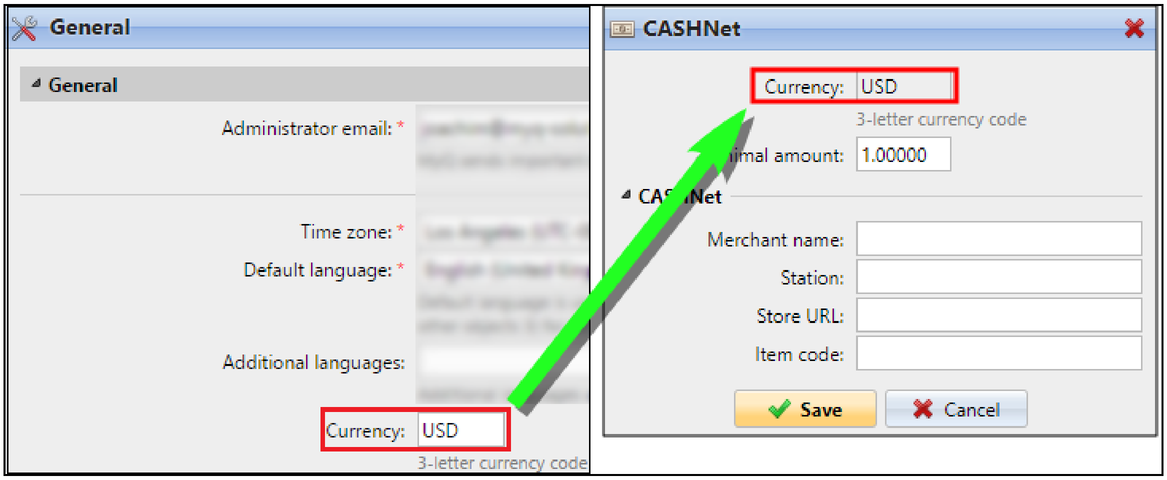


FIGURE 13.52. Setting the currency to be used on the MyQ server

IV. Type the minimal amount that users will have to pay when they will buy credit.

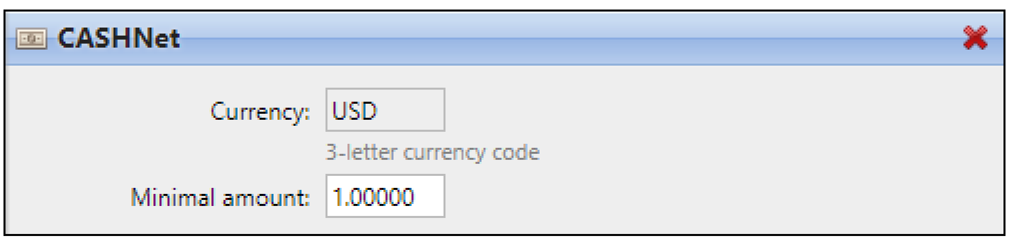


FIGURE 13.53. The minimal amount for recharging credit

V. Enter the **Merchant name**, **Station**, **Store URL** and **Item Code** of the **Checkout** store, and then clik **Save**.

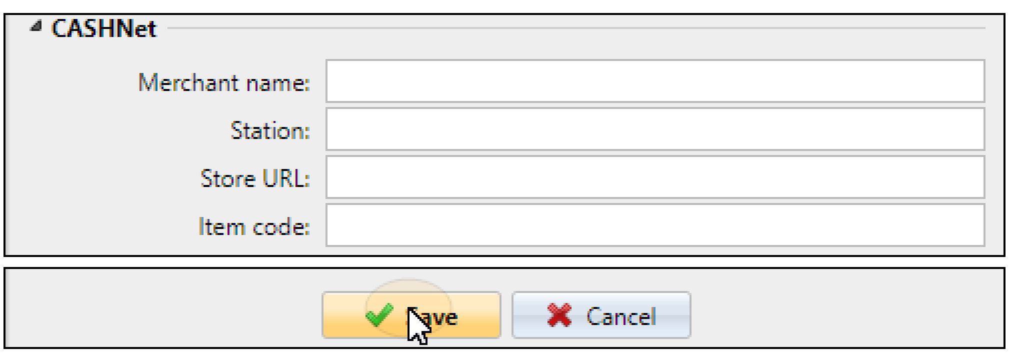


FIGURE 13.54. The credentials of the previously created app need to be entered in MyQ

26.6.2. Buying credit via CASHNet on the user's account on the MyQ Web Interface

First of all, the user needs to log in to their account on the MyQ Web Interface.

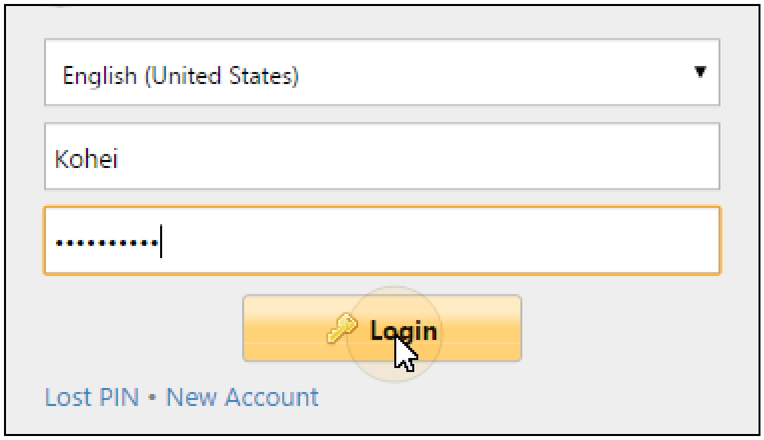


FIGURE 13.55. MyQ Web Interface Login

To recharge the credit there, the user has to click **Recharge credit** under **Credit**. The **Recharge credit** dialog appears.

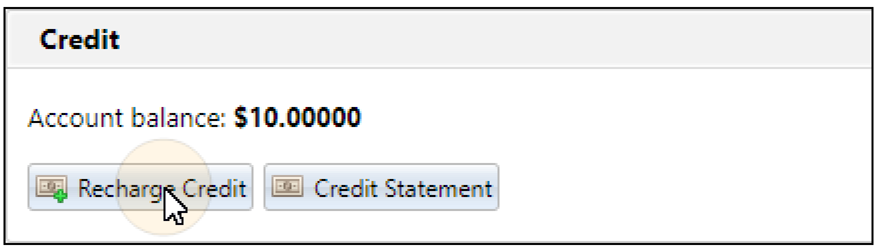


FIGURE 13.56. Recharging credit

In the dialog box, the user has to select the **CASHNet** payment provider, enter the amount of credit that they wants to buy, and then click **Recharge Credit**.

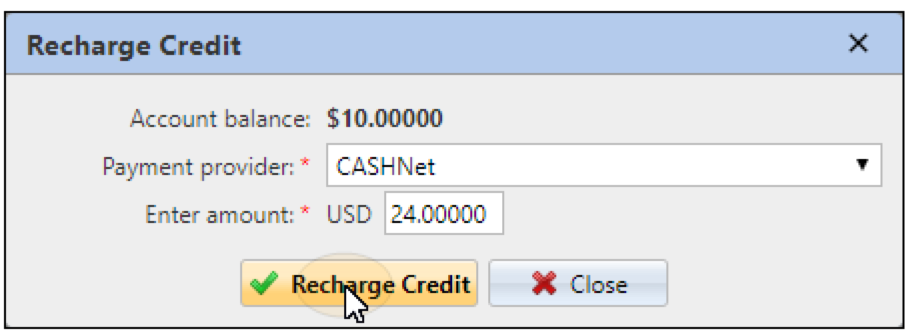


FIGURE 13.57. Recharging credit via the CASHNet

A window with the CASHNet payment options opens in the Web Browser; the rest of the steps correspond to the standard CASHNet payment process.

After the payment is successfully sent to MyQ, the **Payment successful** dialog box appears.

NOTICE: CASHNet tries to connect to the MyQ server via the hostname or IP address that is set on the **Network** settings tab of the MyQ Web Interface. In case a hostname is set on the tab and paying users receive the **"This site can't be reached / XYZ's server DNS address could not be found. / DNS_PROBE_FINISHED_NXDOMAIN "** message.
Try to replace the hostname with the IP address of your server.

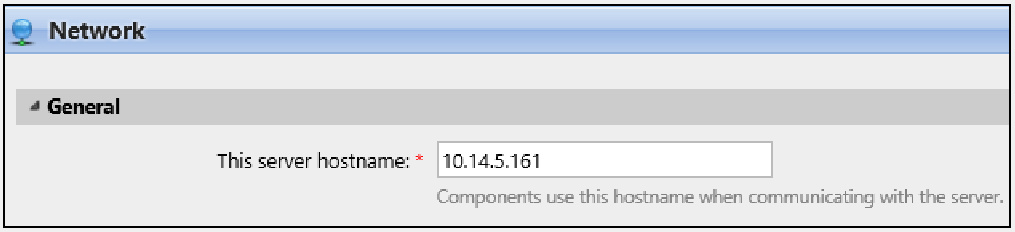


FIGURE 13.58. The information about the IP address of the MyQ server is taken from the **This server hostname** setting.

26.7. Recharging credit via SnapScan

With the SnapScan app, users can pay for their MyQ credit via a QR code displayed in the app on their mobile phones. The following two sections show how to set up and use this payment option.

To be able to connect SnapScan to MyQ, you need to create a **Merchant Snapscan Account** and obtain the **Merchant Account API**. Within the setup of the connection on on the MyQ Web Interface, you must enter the **Merchant ID** and the **API key** of the account.

As SnapScan is a South African service, users need to use a phone with a **South African Mobile number (+27)** to be able to scan the QR code and pay for the credit.

26.7.1. Setting up the SnapScan payment option

To set up the SnapScan payment option on the MyQ Web Interface, follow these steps:

I. Open the **Credit** settings tab.

   a. Click **MyQ** at the top-right corner,

   b. then click **Settings**,

   c. and finally click **Credit**.)

II. On the tab, under **Payment providers**, double-click the **SnapScan** payment provider. The **SnapScan** properties panel opens on the right side of the tab.

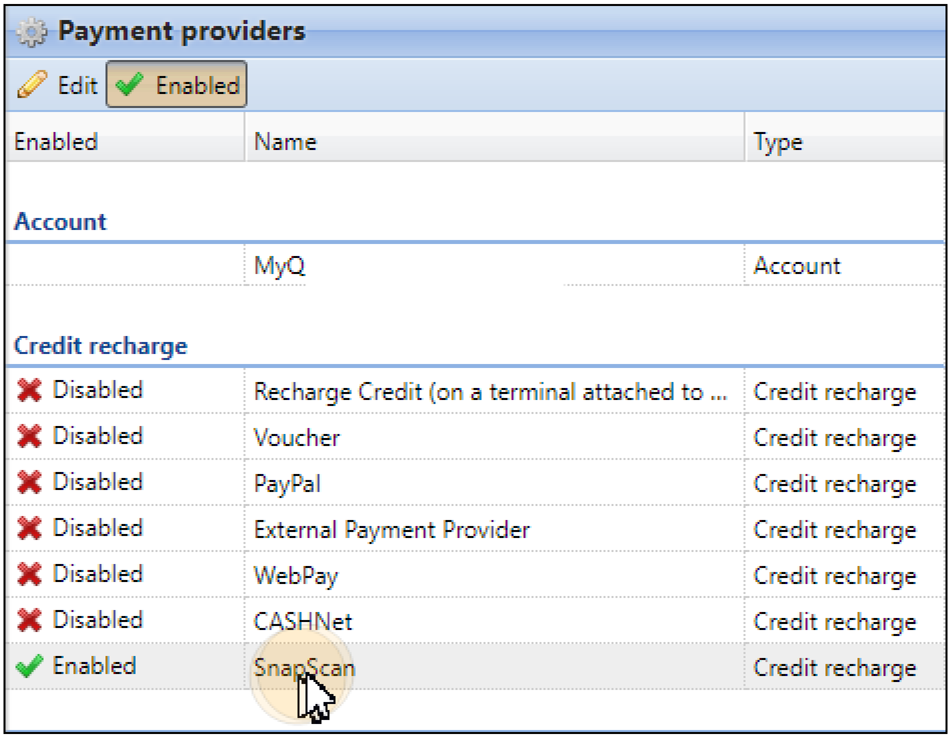


FIGURE 13.59. Opening the SnapScan properties panel

III. The value of the **Currency** setting corresponds to the currency set on the **General** settings tab of the MyQ Web Interface. In case of the SnapScan payment method, it needs to be set to **ZAR**.

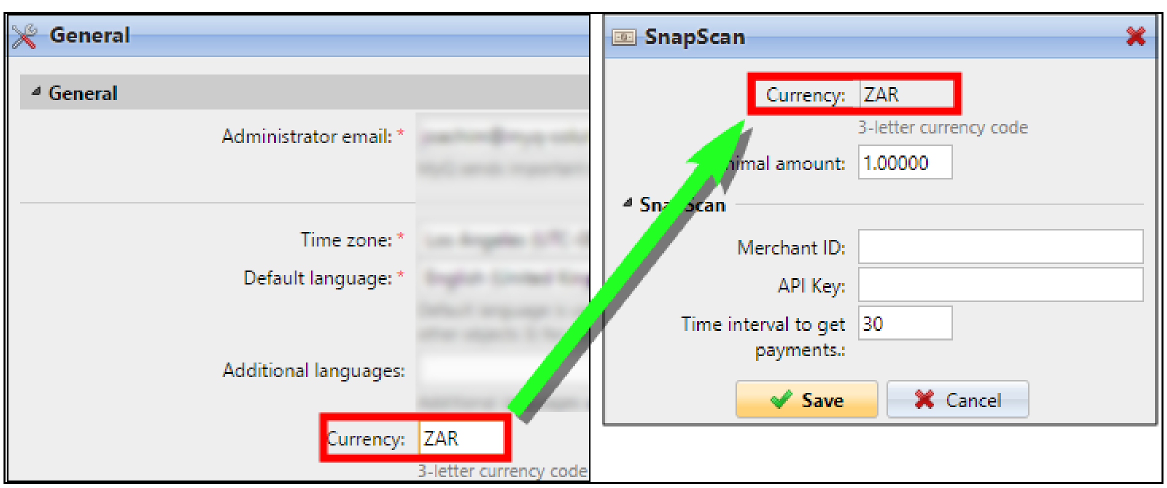


FIGURE 13.60. The currency selected on the **General** settings tab applies to the PayPal payments option.

IV. Type the **Minimal amount** of money that has to be paid when a user buys the credit.

V. Enter the **Merchant ID**(Company Name) and the **API key** provided by SnapScan.

VI. Set the **Time interval to get payments** (in **seconds**), and click **Save**.

The **Time interval to get payments** setting limits the time for the recharge action; if MyQ does not receive confirmation of the payment within the interval, the credit recharge is canceled. If the payment is successful but MyQ does not receive the response within the time limit, the user has to contact the MyQ administrator, who can manually recharge the credit.

26.7.2. Buying credit via SnapScan on the user's account on the MyQ Web Interface

First of all, the user needs to log in to their account on the MyQ Web Interface.

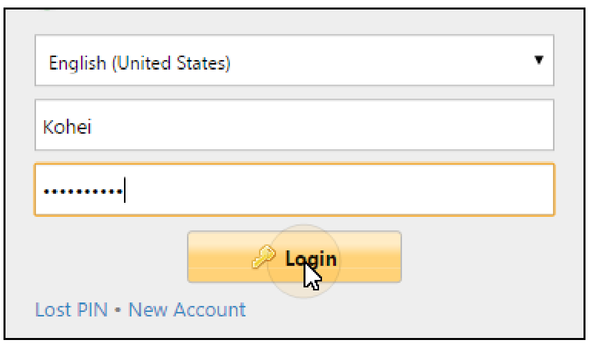


FIGURE 13.61. MyQ Web Interface Login

To recharge the credit there, the user has to click **Recharge credit** under **Credit**. The **Recharge credit** dialog appears.

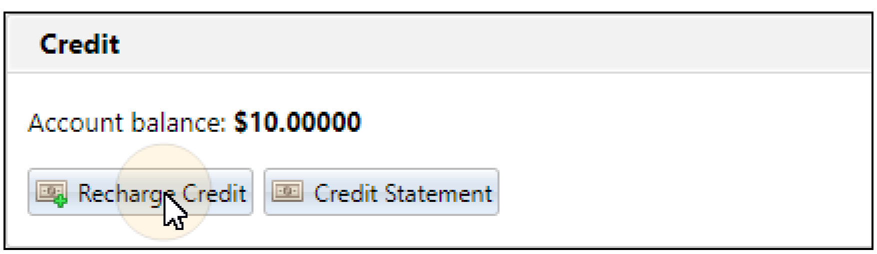


FIGURE 13.62. Recharging the credit

In the dialog box, the user has to select the **SnapScan** payment provider, enter the amount of credit that they wants to buy, and then click **Recharge Credit**.

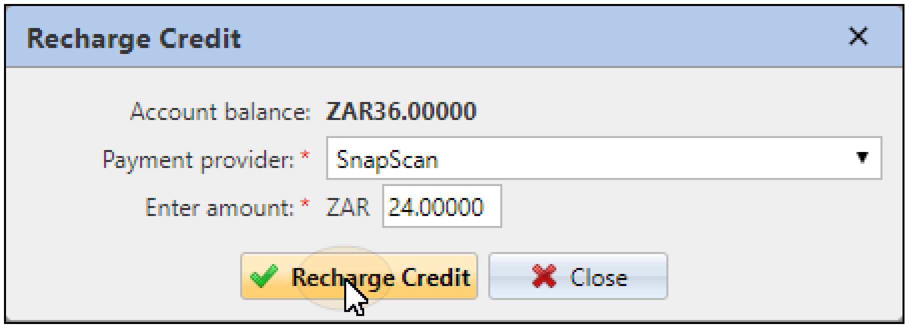


FIGURE 13.63. Recharging credit via the PayPal payment

A window with the SnapScan payment options opens in the Web Browser; the rest of the steps correspond to the standard SnapScan payment process.

After the payment is successfully sent to MyQ, the **Payment successful** dialog box appears.

NOTICE: SnapScan tries to connect to the MyQ server via the hostname or IP address that is set on the **Network** settings tab of the MyQ Web Interface. In case a hostname is set on the tab and paying users receive the **"This site can't be reached / XYZ's server DNS address could not be found. / DNS_ PROBE_FINISHED_NXDOMAIN "** message, try to replace the hostname with the IP address of your server.

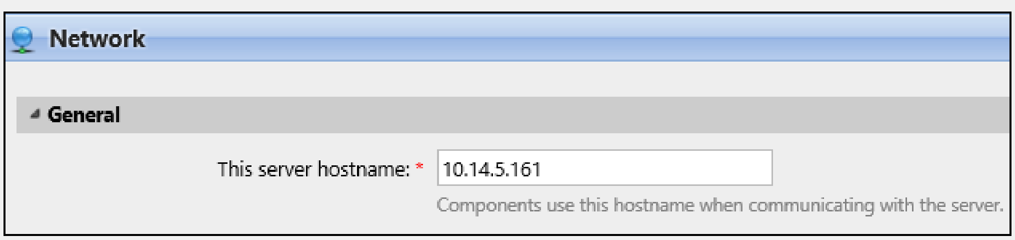


FIGURE 13.64. The information about the IP address of the MyQ server is taken from the **This server hostname** setting.

26.8. Importing credit from a bank statement

In MyQ, you can also import a bulk of credit from a bank statement. The system can process the data from a GPC file.

The variable symbol from the bank statement is used as the unique data for pairing of the payment and the MyQ user. The number must correspond to the personal number of the user. The personal number can be imported or manually entered in the **Personal Number** text box on the user properties panel on the **Users** main tab.

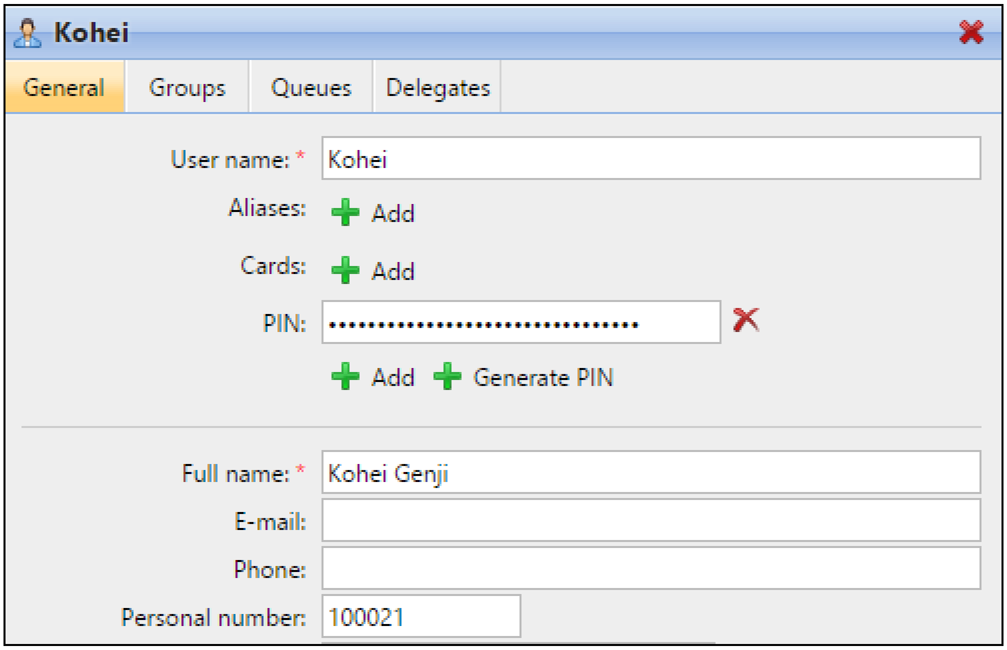


FIGURE 13.65. Personal number shown on the user properties panel

The feature can be managed on the **Credit statement** tab or on the **Users** main tab. To import a bulk of credit from a bank statement on either of the two tabs, do the following:

1. On the bar at the top of the tab (**Users** or **Credit statement**), click **Tools**, and then click **Bulk credit recharge** in the **Tools** drop-down box. The **Bulk credit recharge** dialog box opens.

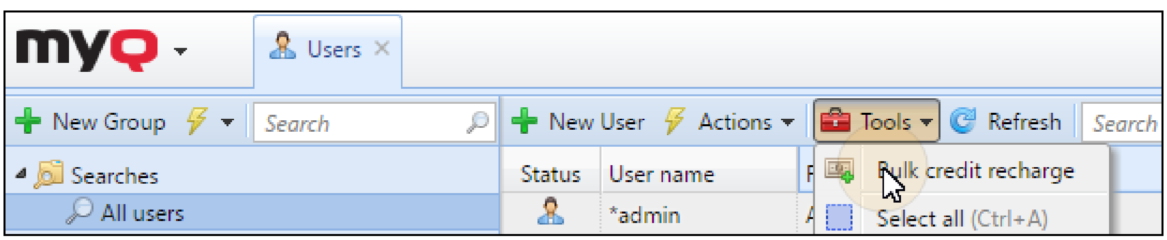


FIGURE 13.66. Opening the bulk credit recharge options on the Users tab

2. In the dialog box, select the **GPC** format option, choose the GPC file, and then click **OK**. Before importing the file,MyQ checks whether the GPC file has not already been imported. This avoids duplication of the credit recharge. If the system finds that the import of data from this file has already taken place, an error message appears and no data are imported.

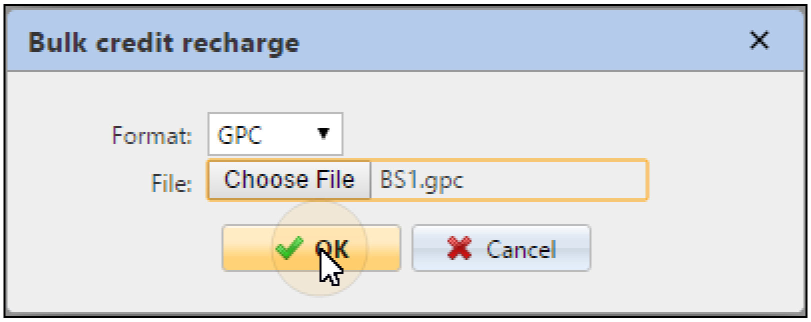


FIGURE 13.67. Recharging credit from a GPC file

If MyQ identifies the GPC file as new, it checks all the payments on the bank statement step by step, and if it finds a variable number equal to the personal number of a MyQ user, the user's credit is increased by the corresponding amount from the bank statement. Once MyQ checks the GPC file, it displays a new html page with a report. The report displays both the users with increased credit and the payments with variable number not corresponding to any personal number in MyQ.

26.9. Importing credit from a CSV file

Another way of recharging the credit is to upload the credit amounts for any number of MyQ users from a CSV file. This can be done either on the **Credit statement** main tab, or on the **Users** main tab of the MyQ Web interface.

To import a bulk of credit from a CSV file on either of the two tabs, do the following:

1. On the bar at the top of the tab (**Users** or **Credit statement**), select the user, then click **Tools** on the bar at the top of the tab, and then click **Bulk credit recharge** in the **Tools** drop-down box. (See FIGURE 13.66 on the previous page.) The **Bulk credit recharge** dialog box opens.

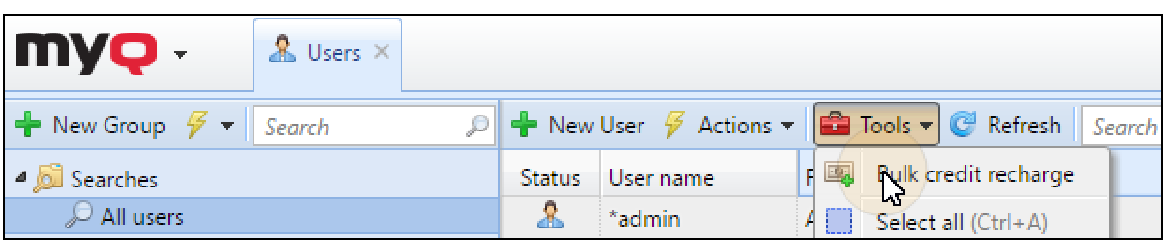


FIGURE 13.68. Opening the bulk credit recharge options on the Users tab

2. In the dialog box, select the **CSV** format option, choose the CSV file, and then click **OK**. You will be informed about the success of the operation. You may see the added amount of credit in the **Credit** columns on the user list.

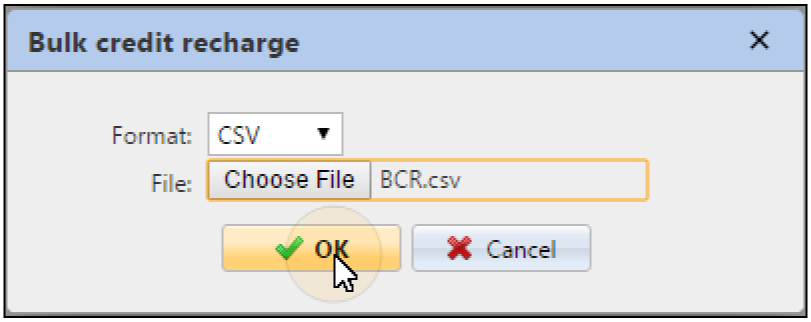


FIGURE 13.69. Recharging credit from a CSV file

Structure of the CSV file:

Each non-empty raw has to consist of two entries separated by a delimiter: **name of the user*delimiter*amount of credit**. The entered delimiter has to be the same as the delimiter set on the **General** settings tab under **Column delimiter in CSV**.

26.10. Manual reset of users' credit on the MyQ Web Interface

The administrator (and users authorized to recharge credit) can manually reset the credit of each user to a specific value. This can be done either on the **Credit Statement** main tab, or on the **Users** main tab of the MyQ Web interface.

On the **Credit Statement** tab, you first open the credit reset action, and subsequently select the users and groups whose credit is to be recharged. On the **Users** tab, you first select the users or the group, and then reset their credit.

26.10.1. Providing users with the rights to reset credit

By default, the only person who can reset the credit is the MyQ administrator. However, the administrator can authorize a MyQ user to reset the credit as well. The user needs to be provided with the rights to access the **Users** main tab and reset the credit there. This is done on the **Rights** settings tab of the MyQ Web Interface.

To authorize a user to reset credit on the **Credit Statement** tab, you need to provide them with the right to **Recharge credit**.

To authorize a user to reset credit on the **Users** tab, you need to provide them with the right to **Recharge credit** and the right to **Manage Users**.

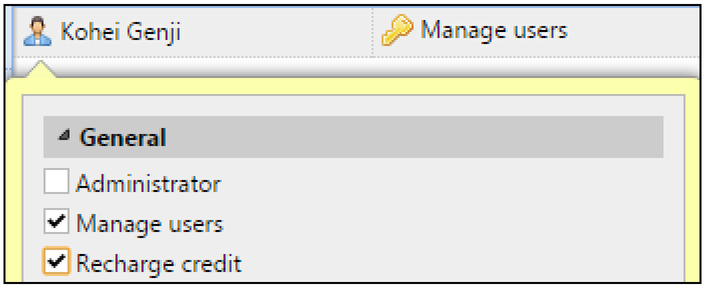


FIGURE 13.70. Authorizing users to recharge credit on the **Users** tab

The authorized user can reset the credit on their MyQ Web interface in the same way as the MyQ administrator.

26.10.2. Resetting credit on the Credit Statement tab

On the **Credit Statement** tab, you can overview the changes in the credit balance of MyQ users, and also reset credit to users and groups. To open the tab on the MyQ Web Interface, click **MyQ**, and then click **Credit Statement**.

To reset credit to users or groups, do the following:

1. Click **Reset Credit**. The **Reset Credit** dialog box appears on the tab.

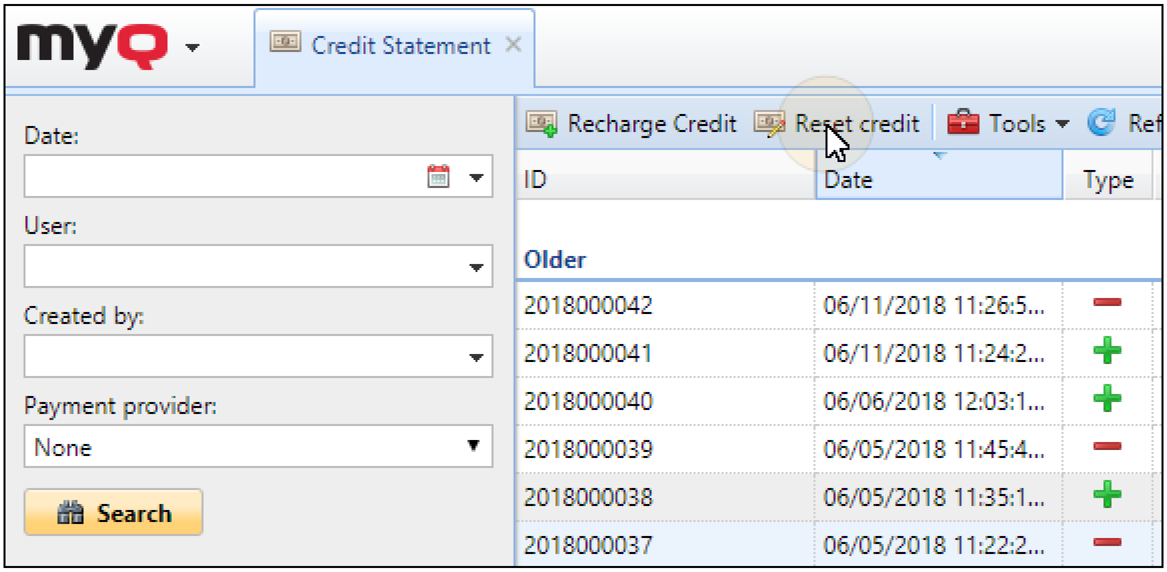


FIGURE 13.71. Opening the **Reset Credit** options

2. In the dialog box, either enter an ID of a user's card, or select the users and groups to reset the credit to, then enter the new value of the credit, and lastly click **Reset Credit**.

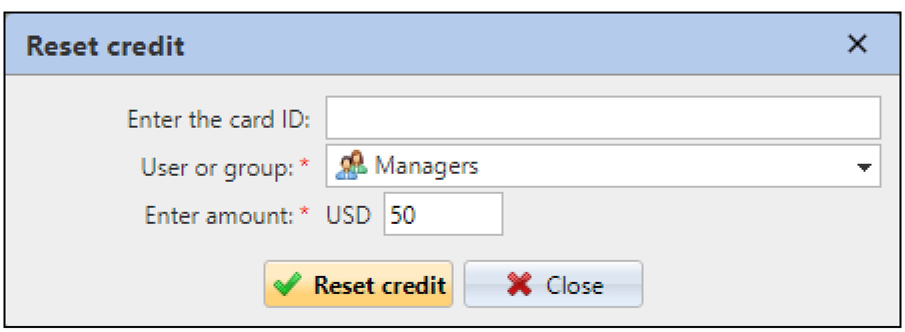


FIGURE 13.72. Setting the recharge in the **Recharge Credit** dialog box

26.10.3. Resetting credit on the Users main tab

To open the **Users** main tab on the MyQ Web Interface, click **MyQ**, and then click **Users**.

To reset the credit on the Users main tab, do the following:

1. Select the users, click **Actions**, and then click **Reset credit** in the actions drop-down box. (Or select the users, right click one of them, and then click **Reset Credit** on the shortcut menu.) The **Reset Credit** dialog box opens.

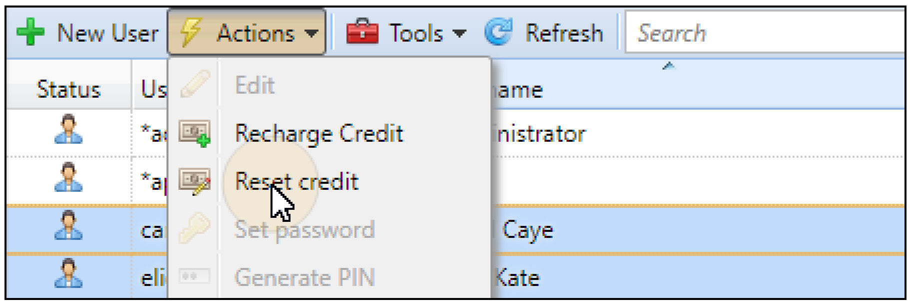


FIGURE 13.73. Resetting the credit in the **Actions** drop-down box on the **Users** main tab

2. In the dialog box, enter the new value of the credit, and then click **OK**. The credit is reset to the specified amount.

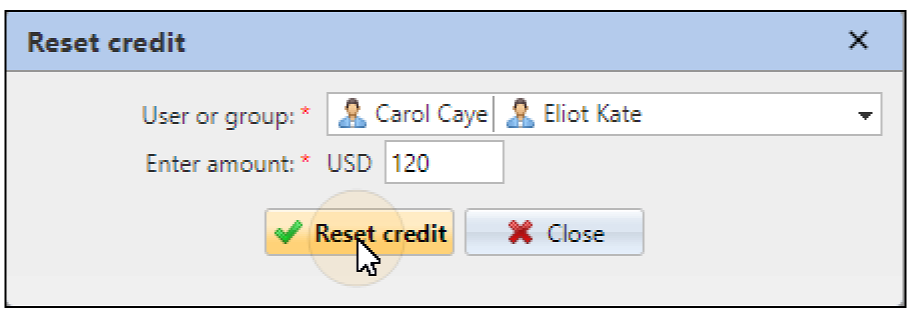


FIGURE 13.74. Entering the new value of the credit in the **Reset Credit** dialog box

To reset credit of a group of users, do the following:

1. On the panel on the left side of the **Users** main tab, right-click the group, and then click **Reset Credit** on the shortcut menu. The **Reset Credit** dialog box appears.

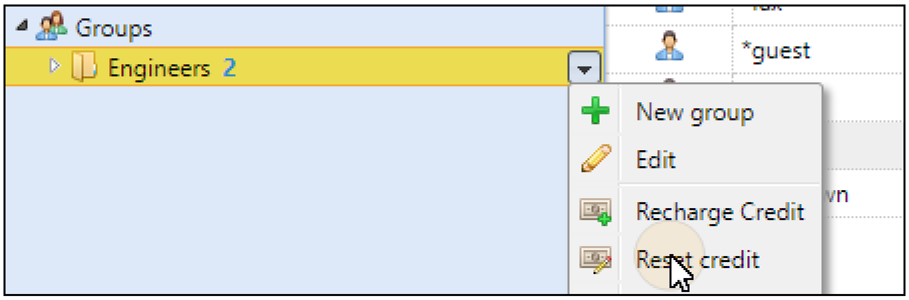
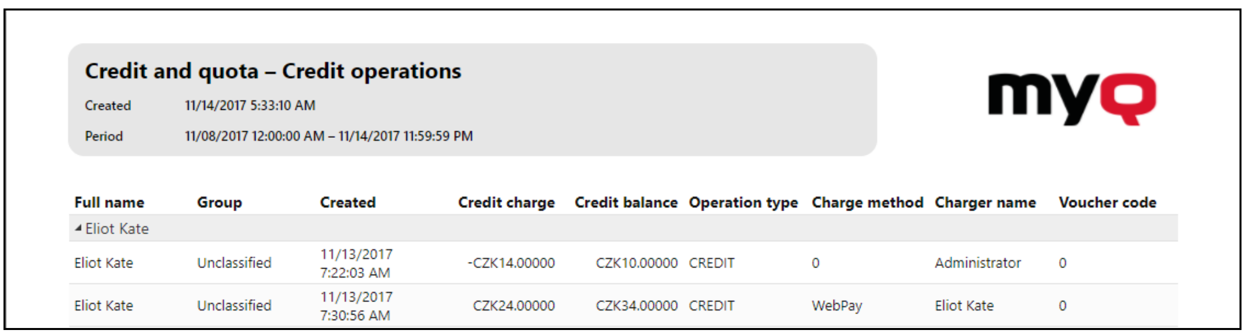


FIGURE 13.75. Resetting credit of a group

2. In the dialog box, enter the amount and click **OK**. The credit is reset to the specified amount.

26.11. Credit accounting reports



Credit and quota – Credit operations

Created 11/14/2017 5:33:10 AM

Period 11/08/2017 12:00:00 AM – 11/14/2017 11:59:59 PM

Full name	Group	Created	Credit charge	Credit balance	Operation type	Charge method	Charger name	Voucher code
Eliot Kate								
Eliot Kate	Unclassified	11/13/2017 7:22:03 AM	-CZK14.00000	CZK10.00000	CREDIT	0	Administrator	0
Eliot Kate	Unclassified	11/13/2017 7:30:56 AM	CZK24.00000	CZK34.00000	CREDIT	WebPay	Eliot Kate	0

FIGURE 13.76. The Credit operation report

On the **Reports** main tab, you can create, edit and generate two types of reports with information about credit:

- The **Credit balance** type of reports contains information about the actual state of the credit balances of the selected users (or members of the selected group). The data are ordered by user name.

- The **Credit operations** type of reports shows all changes of credit balance of the selected users (or members of the selected group) over a defined time period. It also contains information about the person who either spent or recharged the credit, the type of the recharge method and eventually about numbers of used credit vouchers. The data are ordered chronologically.

INFO: For more information about reports, see Reports.

27. Quota

With the quota feature activated, you can set a limit to the usage of print related services. You can either limit the number of printed or scanned pages, or set an overall cost limit for all the services using prices from a price list. If the limit is close to be reached, the user or group receive an email with a warning and if the limit is reached or exceeded, they can be prevented from further printing and copying.

Each quota can monitor one of the following parameters:

- the total number of printed and copied pages
- the number of printed and copied color pages
- the total number of printed and copied monochrome pages
- the total number of scanned pages
- the overall cost of print services

Quotas are active permanently until disabled and they reset after the specified interval. Users can check their quota status on their web user interface and in the MyQ mobile application. If a printing device is equipped with an embedded terminal, users can see the current percentage of their quota status there.

NOTICE: The quota on overall cost of print services requires setting a price list with prices of particular functions (print/copy/scan – B&W/color) on each printer. Both types of quota (the quota on the number of pages and the quota on the overall cost) require using the Job parser to get the print job metadata (number of pages, color etc.). For information about how to set the prices and how to activate the parser, see Price List and Jobs.

27.1. Activation and general quotas setup

You can enable the **Quota** feature by selecting the **Enable quota** option at the top of the **Quota** settings tab. Each quota can then be individually enabled or disabled on its properties panel.

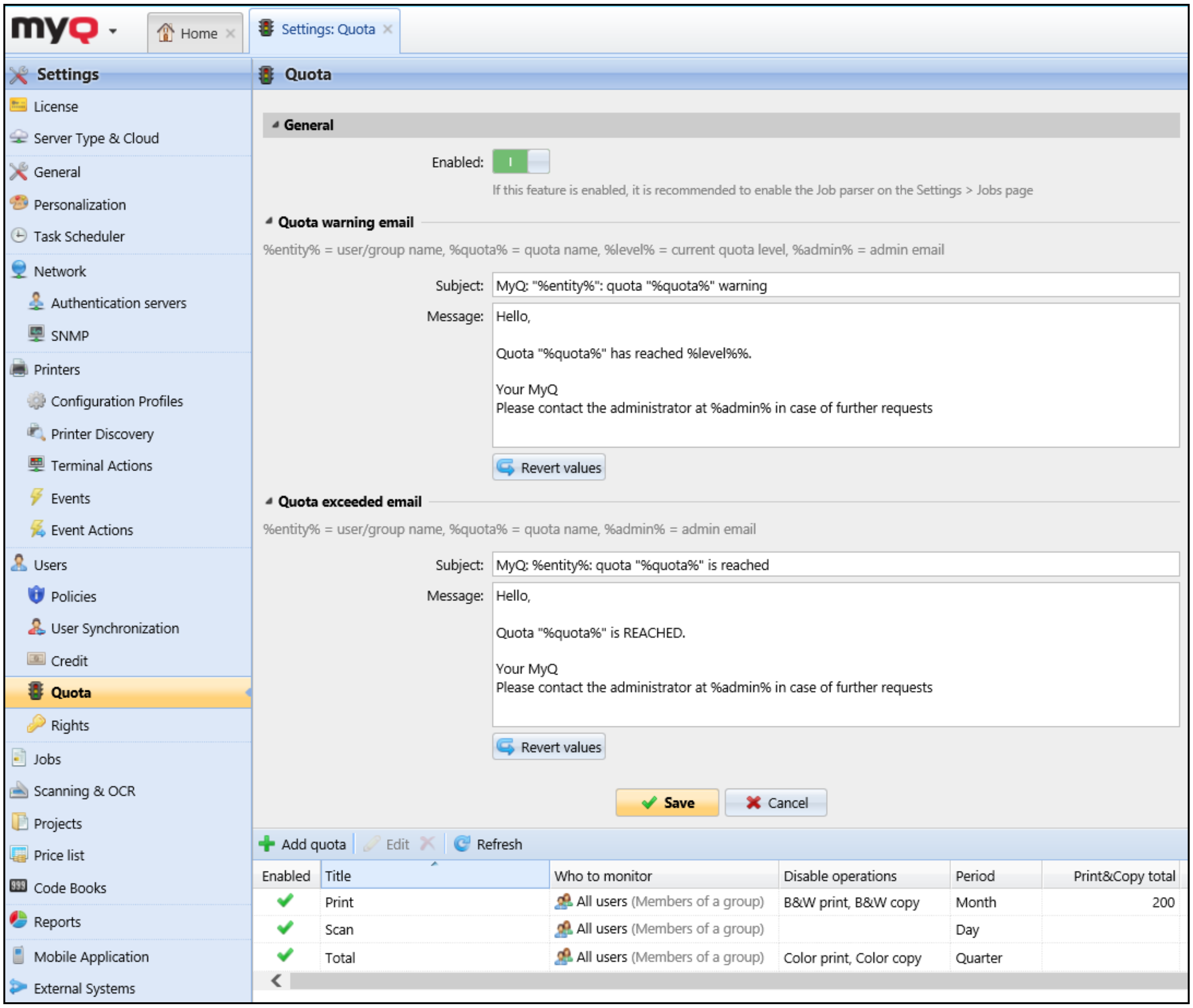


FIGURE 13.77. **Quota** settings tab

On this tab, you can also type the subject and the body of the email that is sent after reaching the preset warning (e. g. 80% of the quota) and the subject and the body of the email that is sent when the limit of a user or group is reached or exceeded.

27.2. Creating, editing and combining quotas

The first two subsections show how to create and set up quotas. The last section, *"Combining quotas"* on page 379, describes the behavior of multiple quotas applied to one action.

27.2.1. Creating new quotas

To add a new quota, do the following

1. On the bar in the bottom section of the **Quotas** settings tab, click **+Add Quota**. The new quota properties panel opens on the right side of screen.

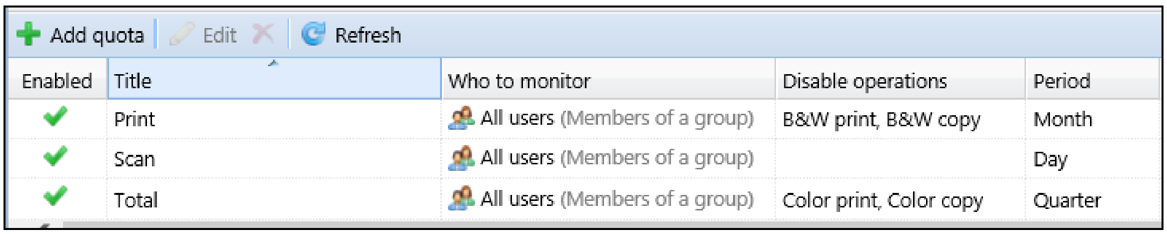


FIGURE 13.78. Adding a new quota

2. On the panel, enter the quota name, set its parameters, and then click **Save**. For more information about the new quota settings, see *"Quota"* on page 374.

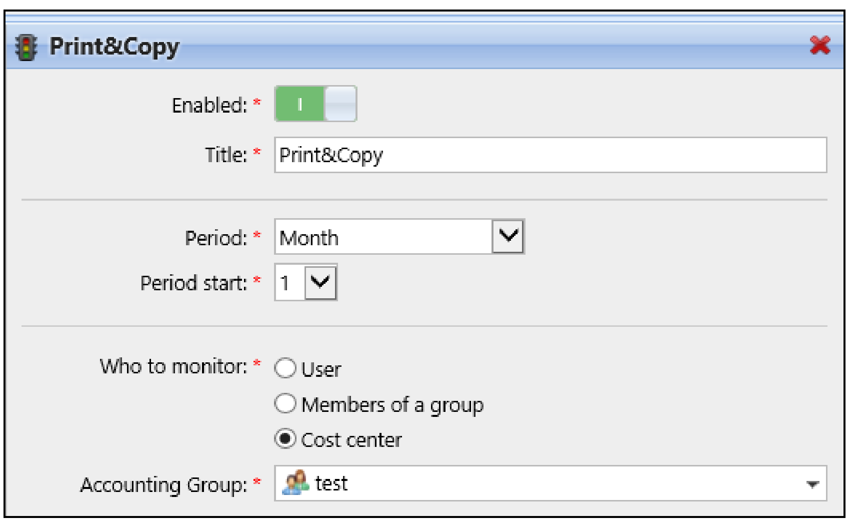


FIGURE 13.79. Quota general properties panel

27.2.2. Editing quotas

The quota properties panel opens immediately after the quota is created. To open an already existing quota, double-click on it on the list on the **Quotas** main tab.

After you set the properties, click **Save** to submit the changes.

Each quota has the following set of properties:

Basic settings: enabling and naming the quota

- Each quota is enabled by default. To disable or re-enable it, click the **Enabled** button.

- Enter the name in the **Title** text box.

Time period

- In the **Period** list box, select the reset period of the quota (*Day, Week, Month, Quarter, Half year, Year, Last X days*). The default period is *Month*.
  The *Last X days* period quota counts the number of pages or the overall cost over the last X days.

  For example, if the quota is 10 pages over three days and the user printed 5 pages the day before yesterday and two pages yesterday, they can print up to three pages today.

- In the **Period start** list box, select the date when the period starts for the *Month, Quarter, Half year* and *Year* **Period**, day of the week for the *Week* **Period** or the number of days for the *Last X days* period.
  - If you choose the *Day* **Period**, you must also set a time at the **Reset quota at** field.

Monitored users or groups

You have to select from three options regarding the quota scope. It can apply to one user, to all members of one group, or to a cost center.

- To select a user to which the quota applies, select the **User** option, and then choose the user from the list.

- To select a group and apply the quota to all its members, select the **Members of a group** option, and choose the group from the list. This way, the quota applies to each user independently. If the limit is ten pages, every user can print ten pages.

- To select a cost center to which the quota applies, select the **Cost center** option, and then choose the cost center group from the list. This way, every member contributes to the total. If the limit is ten pages and one member prints seven pages, there are only three pages remaining for the group.

Monitored value

- If you select *Cost* as the **Monitored value**, the quota is counted in amount of money spent.
  - Set the quota cost **Limit**

- If you select *Pages* as the **Monitored value**, the quota is counted in the amount of printed, copied and/or scanned pages.
  - Set the **Print&Copy total, Print&Copy color, Print&Copy mono** (supported by terminals 8.1 or newer) and **Scan total** in pages.

Actions taken when the warning level is reached

- Enter the warning level (in %) in the **Warning level** text box. After the percentage of the overall limit is reached, a warning email is sent to the user.

- If you want someone else to be notified (for example the user's manager) once the warning level is reached as well, select or enter the users or email accounts in the **Send a notification to** combo box.

Actions taken when the quota is reached

- You can disable one or more operations after the quota is reached or exceeded.
  - If the **Monitored value** is *Cost*, select them under **Disable operations**. The options are *Print, Copy, Color print* (on terminals 8.1 or newer), *Color copy* (on terminals 8.1 or newer), and *Scan*.

  - If the **Monitored value** is *Pages*, mark the **Disable operation** checkbox and the operation that has reached the limit will be disabled.

- Mark the **Terminate the current job when reached** checkbox if you want to interrupt the current job when the quota is reached. If both **Disable operation** and **Terminate the current job when reached** are checked, the job will be interrupted when the quota is reached and the user will be redirected to the MyQ home screen. If **Disable operation** is checked and **Terminate the current job when reached** is not, the current job will be finished and the user will be redirected to the MyQ home screen.
  - The action is not supported by scan quota

- If you want someone else to be notified (for example the user's manager) after the quota is reachedas well, select or enter the users or email accounts in the **Send a notification to** combo box.

27.2.3. Combining quotas

Quotas are independent of each other. Therefore, it is always the most strict quota that applies to a particular user or group.

> **INFO:** Example: There are two quotas applied to a user. Both of them disable printing after a certain amount of printed pages – one after five printed pages and the other after ten printed pages. After the users prints five pages, the lower quota applies and they cannot print.
>
> The quota can be boosted, allowing the user to print more pages. If they print five more pages, the higher quota applies.

27.3. Boosting quotas

In situations when a user or a group of users have reached their quota and urgently need to print, you can boost the quota by a specific number of pages or by a specific amount (in case of the overall price quota). Quotas can be boosted on two tabs of the MyQ Web Interface: the **Quota Boosts** main tab and the **Users** main tab.

27.3.1. Boosting quotas on the Quota Boosts main tab

To open the **Quota Boosts** tab on the MyQ Web Interface, click **MyQ**, and then click **Quota Boosts**.

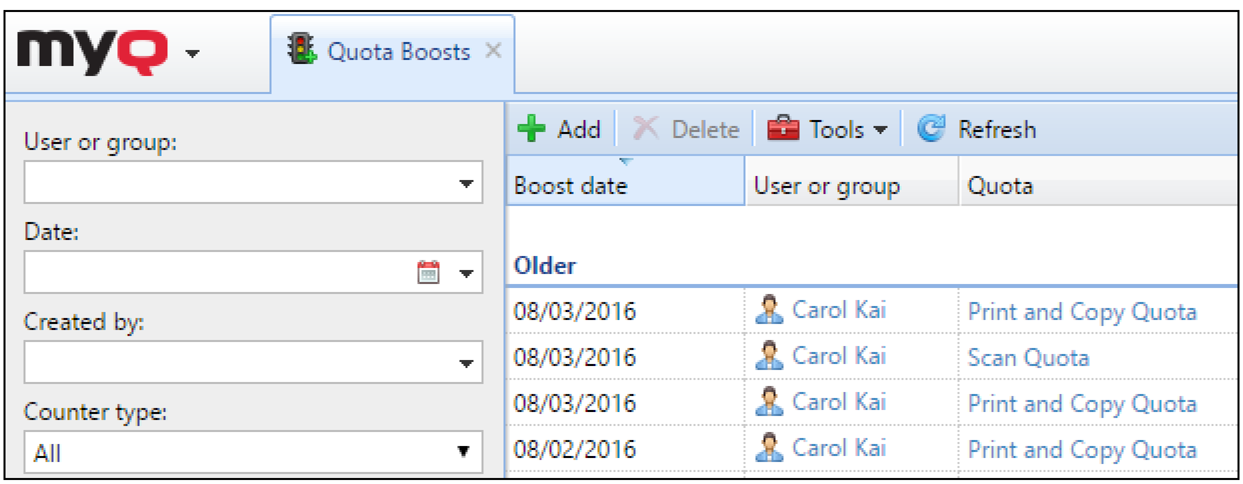


FIGURE 13.80. The **Quota Boosts** main tab of the MyQ Web Interface

To boost a quota here, do the following:

1. On the bar at the top of the tab, click **+Add**. The **Boost quota** dialog box appears.

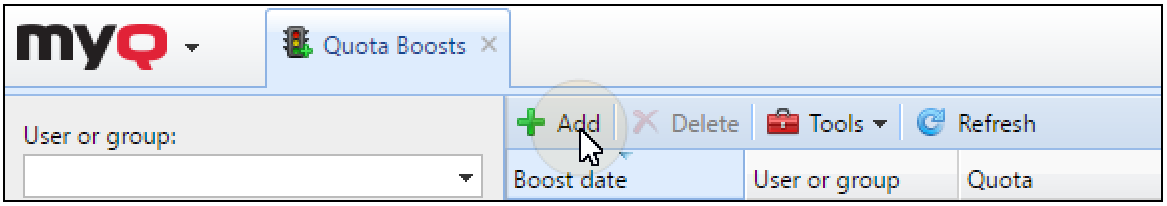


FIGURE 13.81. Opening the **Boost quota** dialog box

2. Select the user or the group of users and the day when you want to apply the quota boost, and then click **OK**. The **Boost quota** dialog box extends – more sections are displayed. First of the new sections shows the current availability of operations and the rest show the quotas applied to the user (or groups of users).

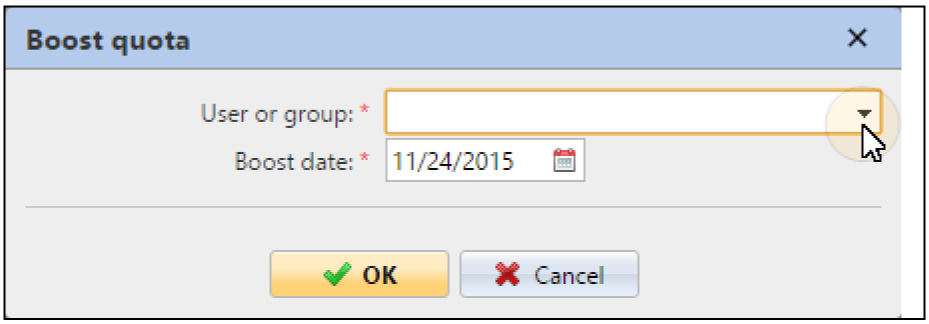


FIGURE 13.82. Boost quota dialog box before selecting the user or group

3. Enter the number of pages or the amount of money to the **Boost By** text box in the particular quotas sections (Each quota has to be boosted separately.), and then click **OK**.Records of the boosted quotas appear on the boost quota records list on the **Quota Boosts** main tab.

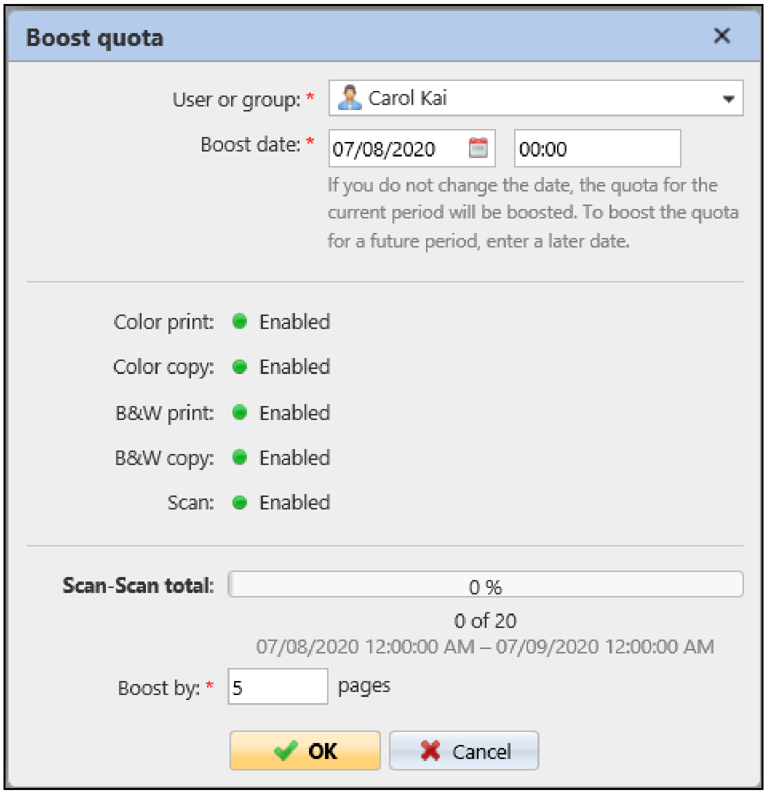


FIGURE 13.83. Boosting a user's quotas

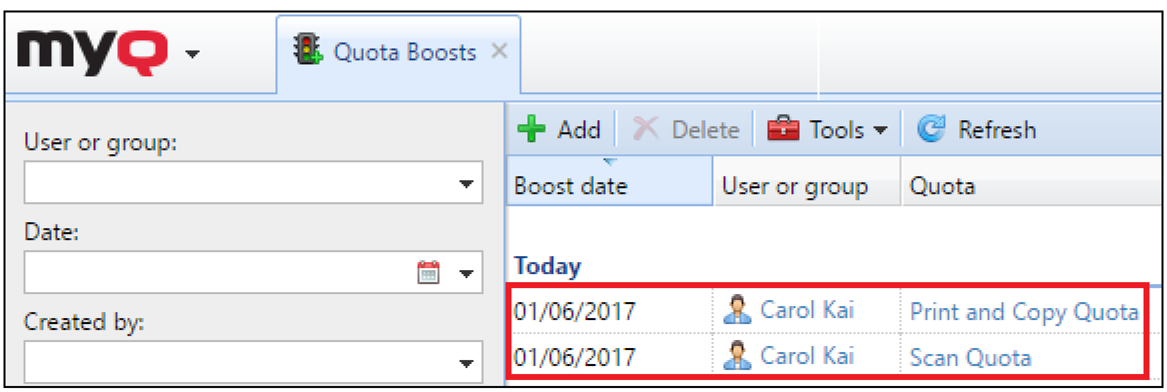


FIGURE 13.84. The records of the last quota boost displayed on the **Quota Boosts** main tab

27.3.2. Boosting quota of a particular user on the Users main tab

To open the **Users** main tab, click **MyQ**, and then click **Users**.

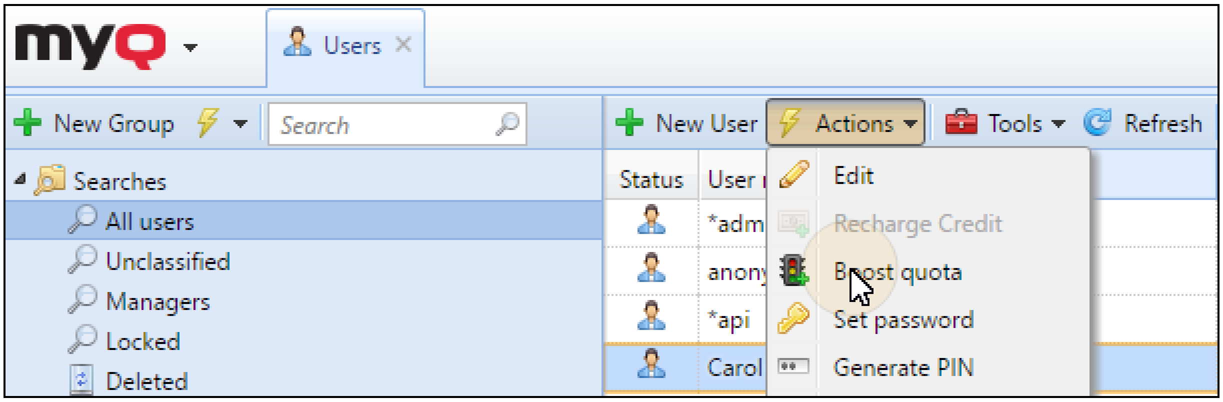


FIGURE 13.85. The Users main tab on the MyQ Web Interface

To boost a quota here, do the following:

1. On the tab, select the user, click **Actions** , and then click **Boost quota** in the Actions drop-down box. (Or right-click the user, and then click **Boost quota** on the shortcut menu.) The **Boost quota** dialog box appears with the user selected in the **User or group** drop-down combo box.

2. Enter the number of pages or the amount of money to the **Boost By** text box in the particular quotas sections (Each quota has to be boosted separately.), and then click **OK**. (See FIGURE 13.83 on the previous page.)

   Records of the boosted quotas appear on the boost quota records list on the **Quota Boosts** main tab. (See FIGURE 13.84 on the previous page.)

28. Project Accounting

With the project accounting feature activated, users can assign print, copy and scan jobs to particular projects and consequently distribute the print cost among the projects and charge it appropriately. Project accounting can also be used as another independent level of internal accounting in addition to devices, users, and groups. Projects can be manually created on the MyQ web interface or imported from a CSV file. They are assigned to print jobs in the Smart Job Manager pop-up window, on the MyQ web interface, on an embedded terminal, on a touch panel of a HW terminal or in the MyQ mobile application.

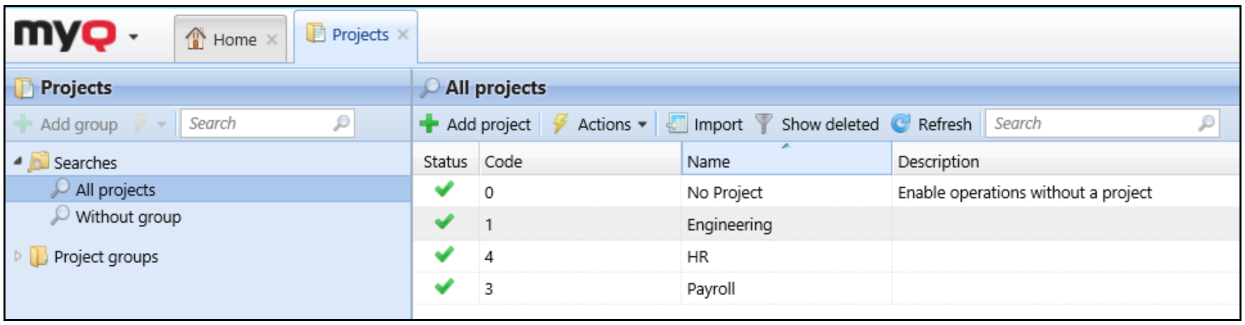


FIGURE 13.86. The **Projects** main tab of the MyQ Web Interface

INFO: On most of the MyQ embedded terminals, projects can be assigned to scanned and copied jobs as well.

28.1. Projects activation and setup

On the **Projects** settings tab, you can enable, or disable projects. Furthermore, you can change the global settings of the projects feature there.

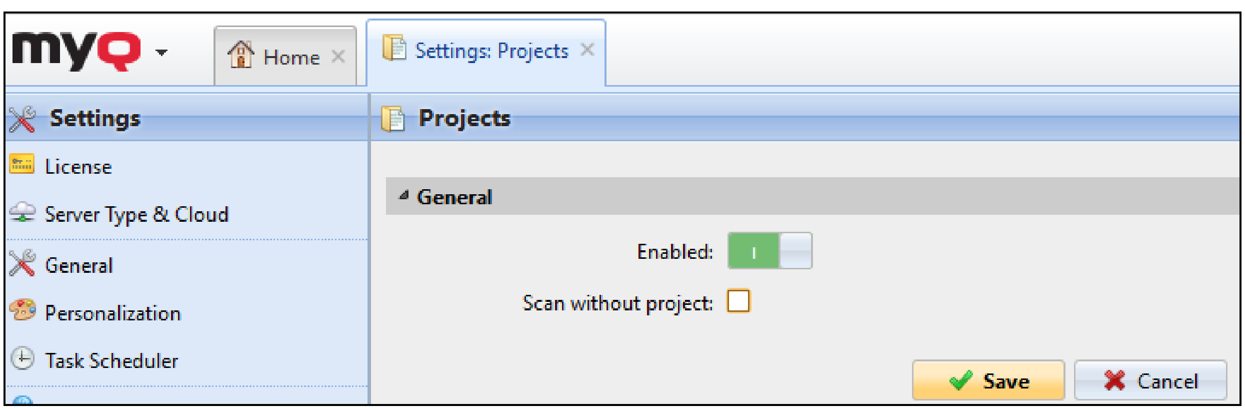


FIGURE 13.87. The **Projects** settings tab of the MyQ Web Interface

Select the **Enabled** option on the Projects settings tab, to globally activate project accounting

Projects options:

Scan without a project: Users scan directly when this option is selected. They have to select a project when the option is not selected.

INFO: For more information about monitoring local printing devices, see Local Print Device Monitoring.

INFO: Users with project rights can set rights on project folder level and give other users rights to projects.

28.2. Adding and editing individual projects

On the **Projects** main tab of the MyQ Web Interface, you can create and edit projects. For each project, you can select the users or groups that will be able to use it. To open the **Projects** main tab, click **MyQ**, and then click **Projects**.

28.2.1. Creating projects

To add new projects to the MyQ system, do the following:

1. On the bar at the top of the **Projects** main tab , click **+Add Project**. The new project properties panel opens on the right side of screen.

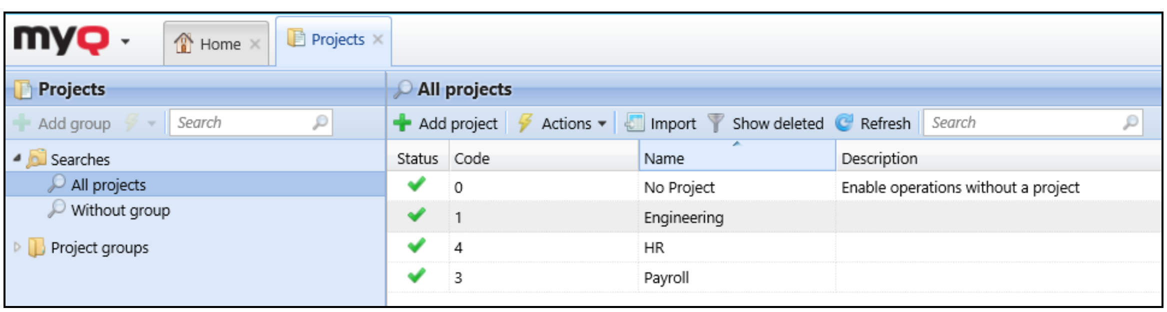


FIGURE 13.88. Adding new projects

2. On the panel, enter the project name, code, optionally its description, and then click **Save**.

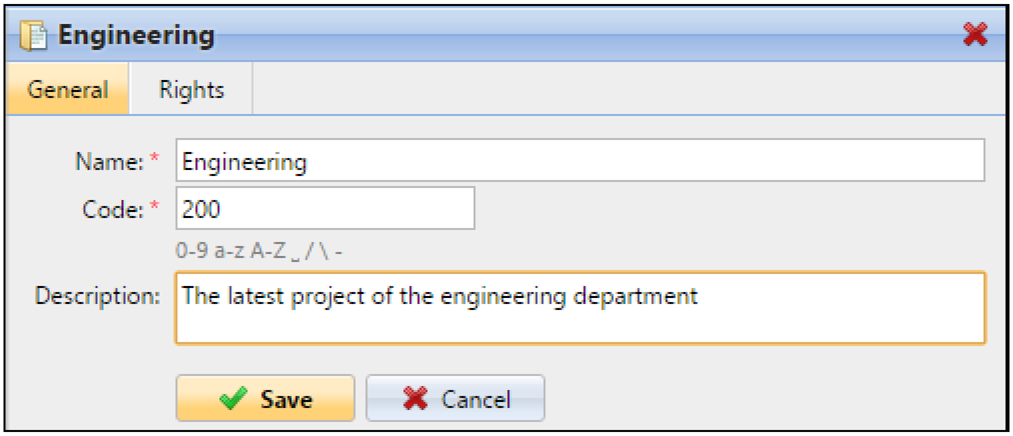


FIGURE 13.89. Setting and saving the new project on its properties panel

NOTICE: The project code must be unique.

28.2.2. Providing users with rights to a project

The rights are added on individual projects properties panels. To open a project properties panel, double-click the project. The panel opens on the right side of screen. By default All users have rights for every project.

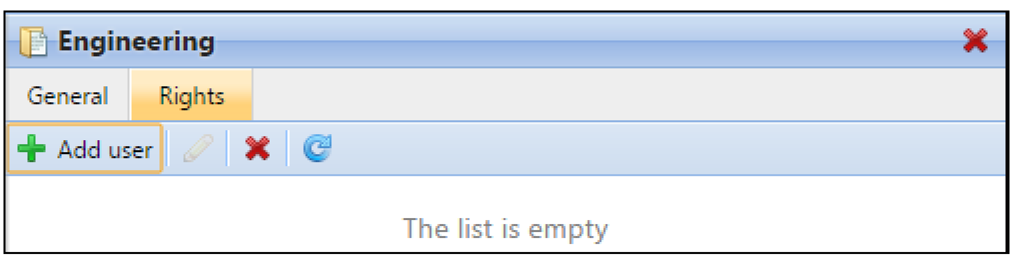


FIGURE 13.90. The **Rights** tab of a project properties panel

To provide a user or a group of users with rights to a project:

1. Open the project properties panel , and then click **Rights** on the bar at top of the panel. The **Rights** tab opens.

2. On the bar at the top of the **Rights** tab, click **+Add User**. The **Select user or group** dialog box appears.

3. In the **Select user or group** dialog box, select the user (or group of users) that you want to provide with rights to the project, and then click **OK**.

To remove rights to the project from a user or a group of users:

- On the **Rights** tab, select the user (or group of users), and then click the remove button ( ). The user (or group of users) disappears from the **Rights** list.

28.3. Project management

After the projects are created, you can see the list of them on the **Projects** main tab. Using the buttons on the bar at the top of the tab, you can add new projects, edit current projects, import projects from CSV files and display/hide deleted projects.

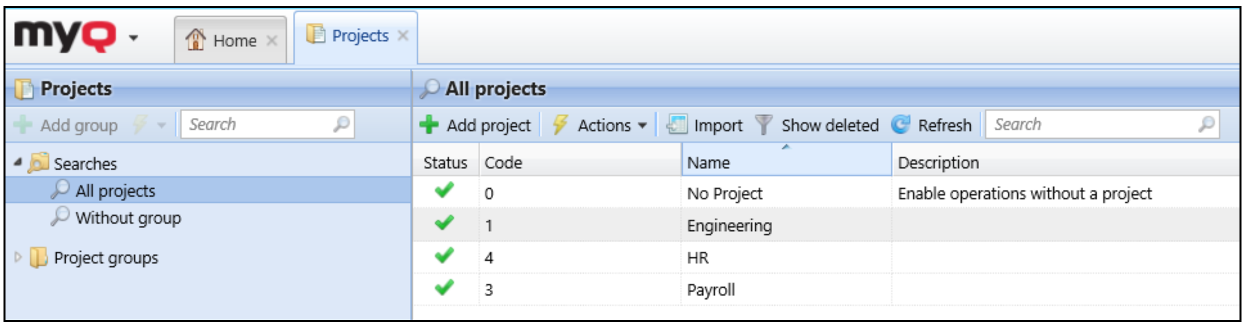


FIGURE 13.91. Managing projects on the **Projects** main tab

Restoring deleted projects

1. Click **Show deleted** to display the project.

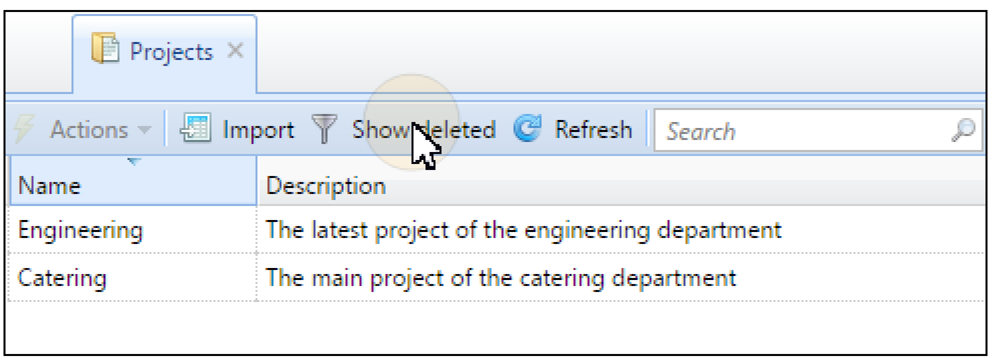


FIGURE 13.92. Managing projects on the **Projects** main tab

2. Select the project, click **Actions**, and then click **Undelete** in the **Actions** drop-down box.

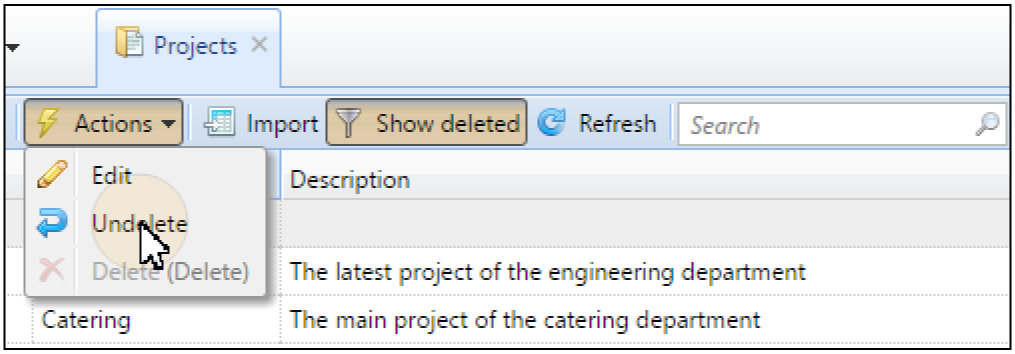


FIGURE 13.93. Managing projects on the **Projects** main tab

28.4. Managing project groups

For bigger companies it is easier to manage projects in groups on e.g. a functional or geographical level. The maximum is five levels deep. Rights set on the group level will automatically be inherited by sub-groups and / or the projects inside these groups. It is then possible to set specific rights to sub-groups or specific projects. After saving these rights they will not be overwritten by the default group rights.

Creating groups

1. Right-click **Project groups** and select **New group**.
2. Set **Name** on the **General** tab of the project group in the right pane.
3. Click the **Rights** tab to add or delete users from the project group.
4. Click **Save**. The project group will be visible in the left pane.

Adding project to a group

1. Click the group to which you want to add a project
2. Click **New project** on the menu bar.
3. Enter the project details.
4. Click **Save**. The number of the Project group will be upped with one.

When you select a project group in the left pane the path is displayed on the top bar of the window.

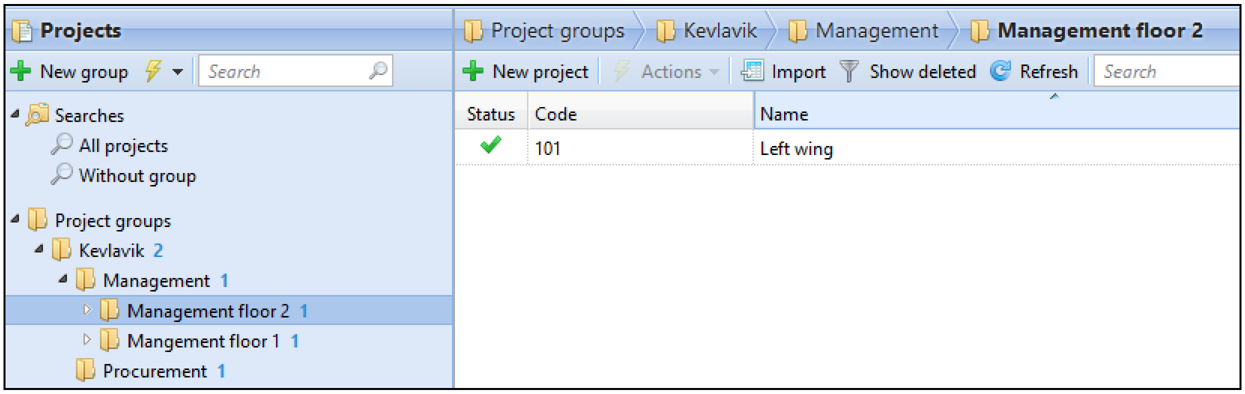


FIGURE 13.94. Managing Project groups

28.5. Importing projects from CSV files

Another option how to add projects to MyQ is to import them from CSV files. It can be done manually and also as a scheduled task. The manual import is described in *"Manually importing projects on the Projects main tab"* below; for information on how to set up the scheduled task, see *"Setting up the Project synchronization scheduled task"* on the facing page. In the last section, *"Syntax of the projects' CSV file "* on page 390, you can find the required syntax of the CSV file.

You can import projects with a hierarchy

INFO: Within the CSV import, new projects are added and existing projects are updated. Projects already present in MyQ that are not listed in the CSV file are left untouched. Each project is recognized by the value of its code and updated only if the CSV file contains a raw with the same code.

28.5.1. Manually importing projects on the Projects main tab

1. On the bar at the top of the **Projects** main tab, click **Import**. The **Import** dialog box appears.

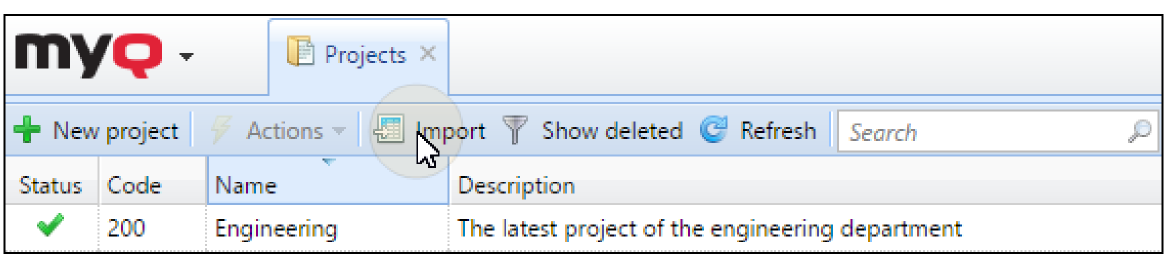


FIGURE 13.95. Opening the **Import** dialog box

2. In the dialog box, choose the CSV file, and then click **OK**. After the import is done, imported projects are displayed on the list of projects on the **Projects** main tab. In addition, an information message bar appears at the top of the tab. By clicking **log for details**, you can display the import log.

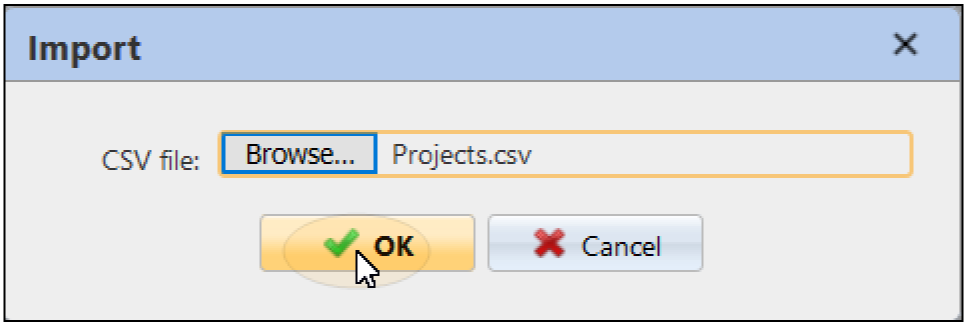


FIGURE 13.96. Importing the projects

NOTICE: Eventual errors occurring during the import can be related to incorrect syntax or non-existing user or group of users listed in the CSV file.

28.5.2. Setting up the Project synchronization scheduled task

1. On the **Task Scheduler** settings tab, click **+New schedule**, and then **Import projects from CSV**. The properties panel of the new synchronization opens on the right side of screen.

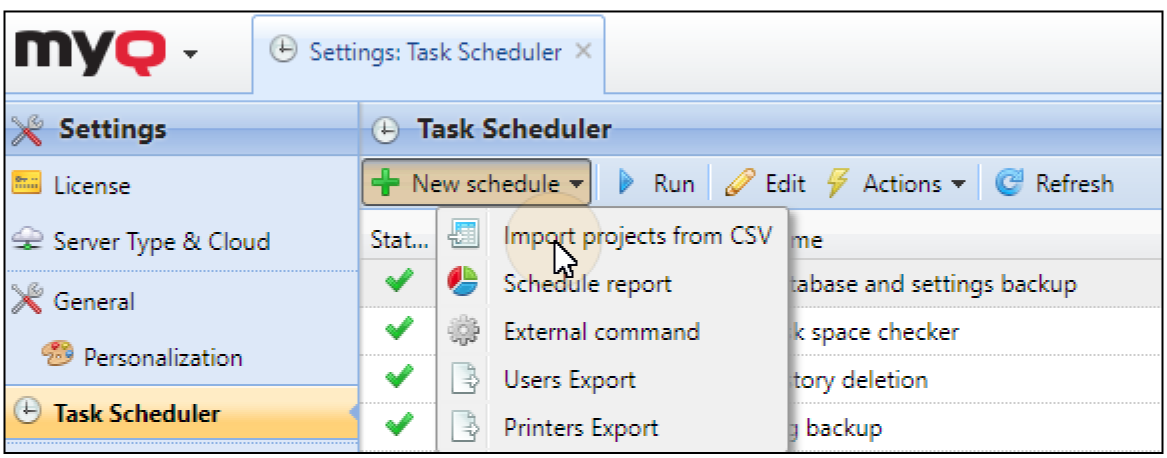


FIGURE 13.97. Creating the new schedule

2. On the panel, set up the schedule

3. Select the CSV file.

4. Click **Save**.

FIGURE 13.98. Setting up the Project synchronization scheduled task

> **NOTICE:** The CSV file for the scheduled synchronization has to be stored on the MyQ server.

28.5.3. Syntax of the projects' CSV file

Each row must consist of six columns, separated by the delimiter set on the **General** settings tab, under **Column delimiter in CSV**. The file has to contain the header row; otherwise the first row is ignored during the import.

active	code	name	description	users	groups
1	300		new department	gobel	
1	400			bors	
1	400			dolezal	

FIGURE 13.99. Six columns of the CSV file

FIGURE 13.100. The **Column delimiter in CSV** setting

Values:

active	1 – project is added to MyQ 0 – project is not added to MyQ
code	unique code of the project
name	name of the project
description	internal description of the project
users	the users or groups of users allowed to use the project multiple entries should be separated by commas

groups	the path of the project in the hierarchy. Levels must be separated by the pipe character "|". If the column is empty, the project is created in or moved to the root of the hierarchy.

28.6. Assigning projects to print jobs

If project accounting is enabled, unassigned print jobs are paused and have to be assigned before they can be printed. They are displayed on the **Jobs** main tab, under **Paused**, with a question mark preceding the job name. You can assign them on the **Jobs** main tab, in the MyQ Smart Job Manager pop-up window or on an embedded terminal.

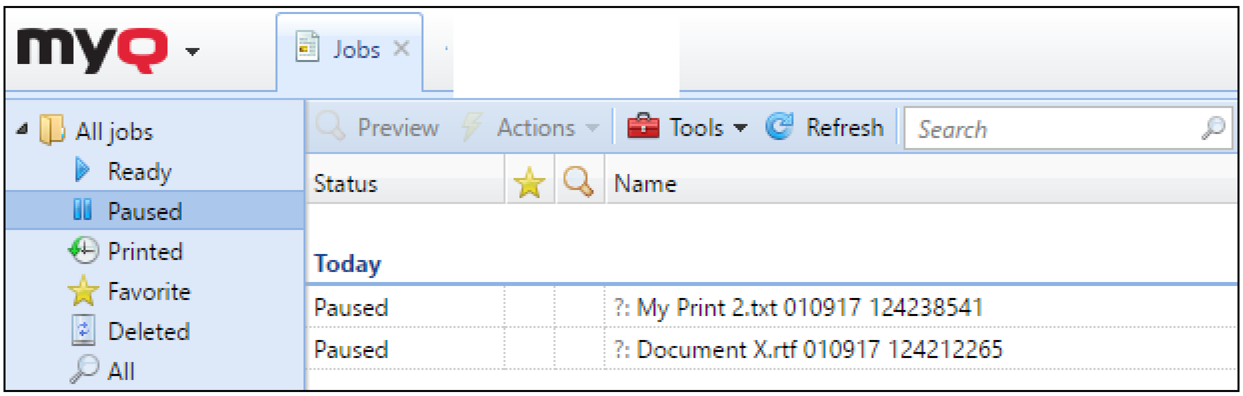


FIGURE 13.101. Unassigned jobs shown on the MyQ Web Interface

As soon as the project is assigned, its name is displayed instead of question mark. If "without project" is selected, the question mark disappears. For more information about how to assign projects in the Smart Job Manager or on the Jobs main tab on the web interface, see the two sections below.

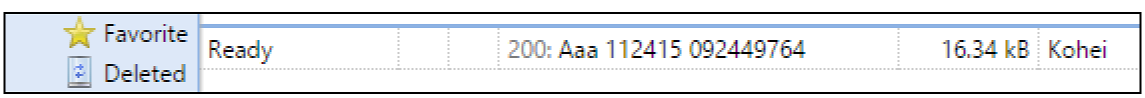


FIGURE 13.102. An assigned project with the project name displayed

INFO: Users who want to print an unassigned job on an embedded terminal have to select one of their projects (projects to which they have rights) or eventually select the **Without project** option there (if they are allowed to print without projects). The same applies to scanning and copying – users have to select one of the projects or the **Without project** option before opening the particular panel or performing a quick action. The exact behavior of project accounting on embedded terminals can vary depending on vendor and device model. See particular embedded terminal manual for further information.

28.6.1. Assigning projects in the MyQ Smart Job Manager

This option is available on computers with either Windows or macOS. It requires the MyQ Smart Job Manager application running on the computer from which the print job is sent.

INFO: For information about the MyQ Smart Job Manager, including installation, setup and optional features of the application, see the **Guide to MyQ Smart Job Manager for Windows or macOS**

MyQ Smart Job Manager is running in the background and, unless Project accounting or any other features of the application are active for the logged user, all print jobs are sent to MyQ without any intervention. Once the user has rights to one or more projects, all the jobs that they send are paused and the MyQ Smart Job Manager pop-up window opens to offer available projects to the user.

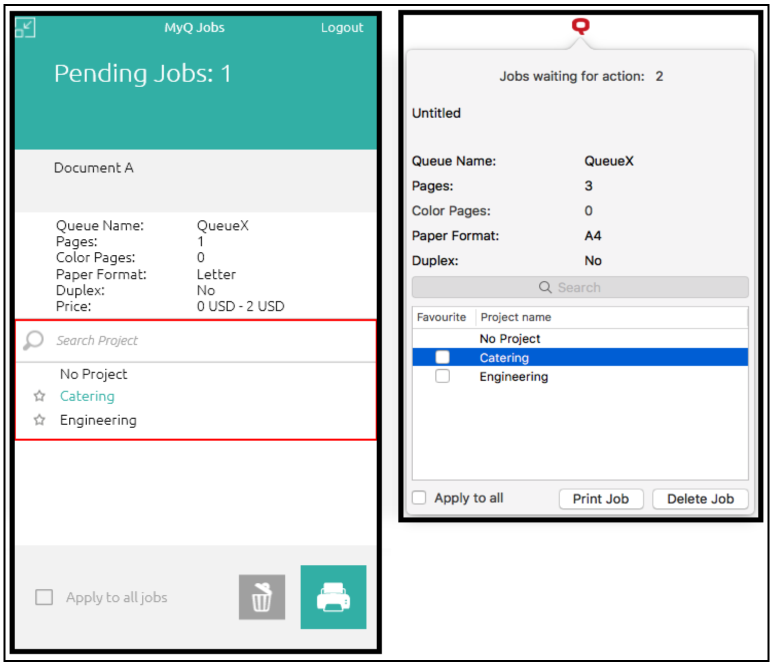


FIGURE 13.103. MyQ Smart Job Manager pop-up windows for MS Windows (left) and for MAC OS (right)

The user can assign the job to an available project and print within that project. If printing without a project is allowed in MyQ, the user can select the **Without project** option, otherwise they have to select one of the available projects. If there are more jobs waiting in the queue, the user can check only some of them to be printed to a particular project and jobs for another project can be printed in the next step.

28.6.2. Assigning Projects on the MyQ Web Interface

To assign a project to a print job do the following

1. On the **Paused** list on the **Jobs** main tab, double-click the print job to which you want to assign the project. The print properties panel opens on the right side of screen.

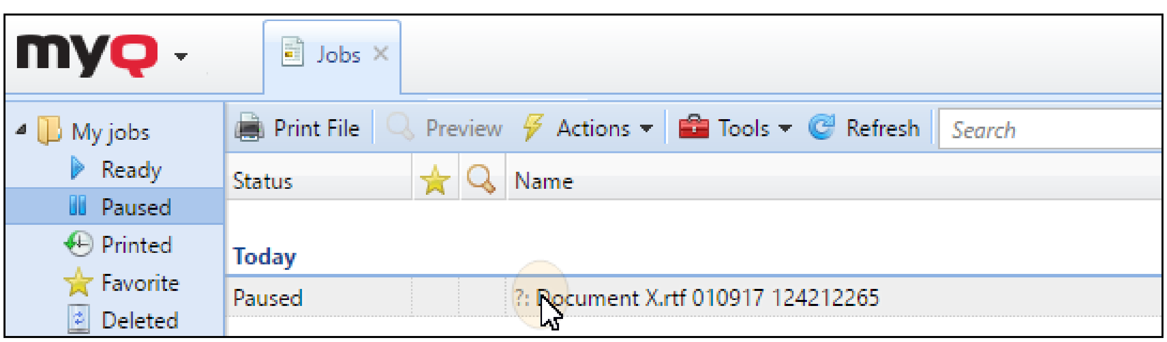


FIGURE 13.104. Opening the print job properties panel

2. On the panel, select the project that you want to assign to the job, and then click **Save**.

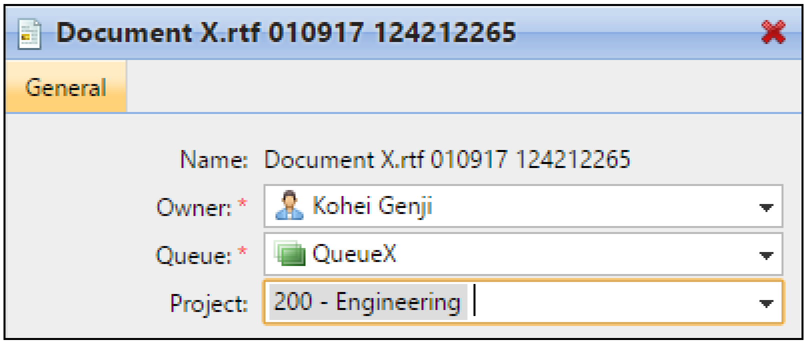


FIGURE 13.105. Assigning the project on the panel

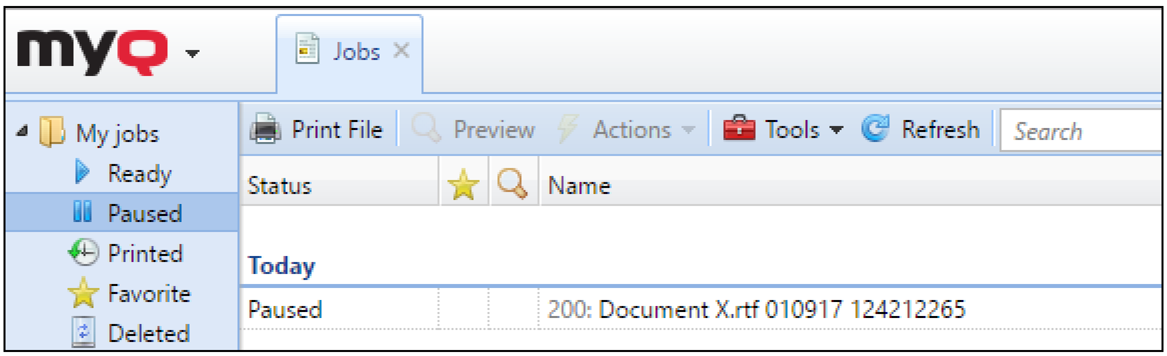


FIGURE 13.106. You can see the project code (200) preceding the project name

29. External Systems

In **MyQ, Settings, External Systems**, there are two sections:

- **External Systems**, and
- **REST API applications**

The **External Systems** section is mainly used with embedded terminals and you can find further details in the *MyQ Embedded terminal manuals*.

The REST API applications section includes the following applications by default: *Mobile Print Agent, Recharge Terminal, Smart Job Manager, Smart Print Services*. They all contain a **Client ID** and **Secret**, to be used for their configuration. You can add more applications by clicking **+Add** and filling in the **Title** and **Scope**.

30. Version Update and Uninstallation

This topic shows you how to update and uninstall the MyQ system.

30.1. Updating MyQ

The MyQ update to a higher version or reinstalling the same version is performed automatically after running the installation executable file.

NOTICE: You can find an upgrade manual with more details on the MyQ Community portal.

NOTICE: Before a MyQ update on Windows Server 2012 / 2012 R2 / 2016 / 2019 (or on Windows 8.1/ 10), make sure that the latest Windows updates are downloaded and installed on the server.

NOTICE: A direct upgrade to 8.0 and higher versions from versions lower than 6.0 is no longer supported. These versions have to be upgraded via an intermediary version, for example via 6.2.
For version 4.2 or lower the intermediary versions are: 4.3 -> 5.2 -> 7.1.
For version 5.2 to 5.10 the intermediary version is 7.1.

To update MyQ:

1. Run the MyQ software installation executable file. The **Select Setup Language** dialog box appears.
2. Select your language, and then click **Next**. The **Setup** dialog box appears. It informs you that there is an older version of MyQ and that the installer will start the update process.
3. Click **Yes**. The **Select Additional tasks** dialog appears.

4. Select if you want a **MyQ Easy Config** shortcut to be created and click **Next**. The rest of the update process is nearly identical to this of installing MyQ except that you are asked to choose upgrade options.

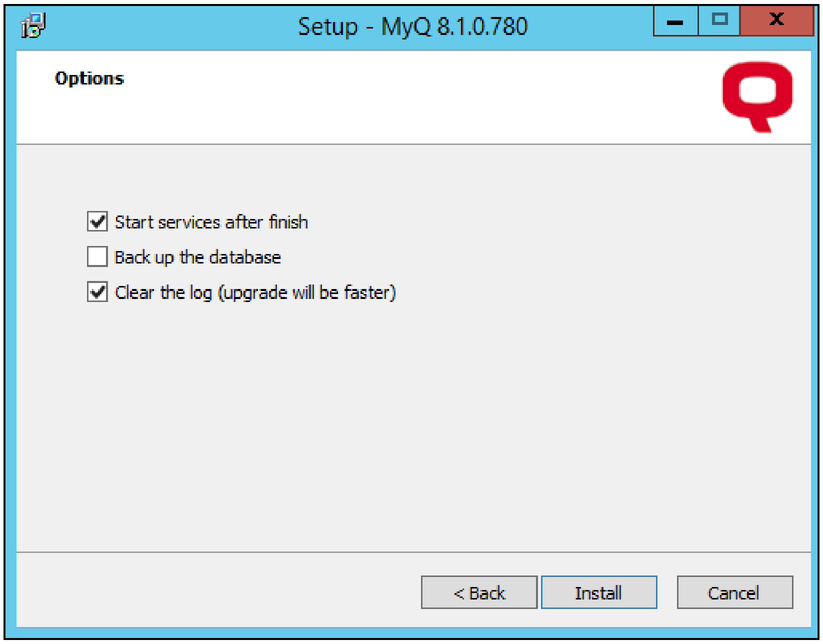


FIGURE 14.1. Upgrade options on the **Setup - MyQ** dialog box

NOTICE: We strongly recommend you to backup your database beforethe update.

30.2. Uninstalling MyQ

To uninstall MyQ:

1. Run **unins000.exe**. You can find this file in your MyQ program folder (The MyQ default folder is: *C:\Program Files\MyQ\ or C:\Program Files (x86)\MyQ*). The **MyQ Uninstall** dialog box appears.

2. Click **Yes**.

NOTICE: All parts of MyQ will be uninstalled except for the Data Folder and its Job Folder (see *"Relocating the data folder and the jobs folder"* on page 19). You can delete these folders manually. In case you install MyQ again, the installation program will ask if you want to use the old database files or replace them with new files.

31. Appendix I: List of available languages and their abbreviations

Language	Abbreviation
Arabic (Saudi Arabia)	ar
Bosnian (Bosnia & Herzegovina)	bs
Bulgarian (Bulgaria)	bg
Chinese (Simplified)	zh-cn
Chinese (Traditional)	zh-tw
Croatian (Croatia)	hr
Czech (Czech Republic)	cs
Danish (Denmark)	da
Dutch	nl
English (United Kingdom)	en
English (United States)	en-us
Estonian (Estonia)	et
Finnish (Finland)	fi
Flemish (Belgium)	-

Language	Abbreviation
French (France)	fr
German (Germany)	de
Hungarian (Hungary)	hu
Icelandic (Iceland)	is
Italian (Italy)	it
Japanese (Japan)	ja
Kazakh (Kazakhstan)	kk
Korean (South Korea)	ko
Latvian (Latvia)	lv
Lithuanian (Lithuania)	lt
Norwegian (Norway)	no
Polish (Poland)	pl
Portuguese (Brazil)	pt-br
Portuguese (Portugal)	pt
Russian (Russia)	ru
Serbian (Serbia)	sr
Slovak (Slovakia)	sk

Language	Abbreviation
Slovenian (Slovenia)	**sl**
Spanish (Spain)	**es**
Spanish (United States)	**es-us**
Swedish (Sweden)	**sv**
Turkish (Turkey)	**tr**
Welsh (Wales)	**cy**

32. Appendix II: Functionalities visible in the Web Admin UI

The functionalities listed below are visible on the Web Administrator Interface and are available for use according to your license.

For more details, check the linked manuals or contact MyQ at info@myq-solution.com.

Functionality	Available in MyQ Smart	Available in MyQ Enterprise	Available in MyQ Ultimate	Related Links
Personalization	Only on the Web UI	Yes	Yes	MyQ Basic Installation Guide
Task Scheduler	Yes	Yes	Yes	MyQ Basic Installation Guide
Network / Authentication servers / SNMP	Yes	Yes	Yes	MyQ Basic Installation Guide
Printers	Yes	Yes	Yes	MyQ Basic Installation Guide
Configuration Profiles	Yes	Yes	Yes	MyQ Basic Installation Guide
Printer Discovery	Yes	Yes	Yes	MyQ Basic Installation Guide
Terminal Actions	No	Yes	Yes	MyQ Embedded Terminal Manuals
Users	Yes	Yes	Yes	MyQ Basic Installation Guide
Policies	Yes	Yes	Yes	MyQ Basic Installation Guide
User Synchronization	Yes	Yes	Yes	MyQ Basic Installation Guide
Credit	Only on the Web UI	Yes	Yes	MyQ Basic Installation Guide
Quota	Only on the Web UI	Yes	Yes	MyQ Basic Installation Guide
Rights	Yes	Yes	Yes	MyQ Basic Installation Guide

Jobs	Yes	Yes	Yes	MyQ Basic Installation Guide
Scanning & OCR	No	Yes	Yes	MyQ Embedded Terminal Manuals
Projects	Only on the Web UI	Yes	Yes	MyQ Basic Installation Guide
Price lists	Yes	Yes	Yes	MyQ Basic Installation Guide
Code Books	No	Yes	Yes	MyQ Embedded Terminal Manuals
Reports	Yes	Yes	Yes	MyQ Basic Installation Guide
Mobile Application	Yes	Yes	Yes	MyQ Basic Installation Guide
External Systems	No	Yes	Yes	MyQ Embedded Terminal Manuals
Log & Audit	Yes	Yes	Yes	MyQ Basic Installation Guide
System Management	Yes	Yes	Yes	MyQ Basic Installation Guide
Service Module	Yes	Yes	Yes	MyQ Basic Installation Guide
ScannerVision	No	No	Yes	upon request

33. Business contacts

MyQ® Manufacturer	**MyQ® spol. s r.o.** Harfa Office Park, Ceskomoravska 2420/15, 190 93 Prague 9, Czech Republic MyQ® Company is registered in the Companies register at the Municipal Court in Prague, division C, no. 29842
Business information	www.myq-solution.com info@myq-solution.com
Technical support	support@myq-solution.com
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