NiceLabel Control Center 10 On-Premises Installation Guide

Rev-2022-10

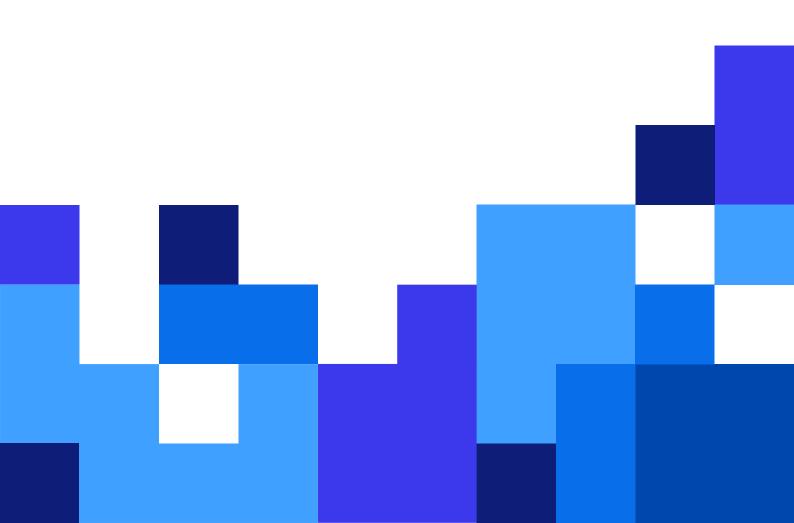


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1. On-premises installation

Whether you need a centralized stand-alone labeling system or large-scale labeling deployments, you can adapt your Control Center installation work with your existing IT system:

- · Simple installation on a single computer
 - · Installing on a single clean computer.
 - · Installing on a computer that hosts the SQL Server.
- Advanced installation where your Control Center and its database run on separate machines:
 - · Installing with database on a stand-alone SQL server.
 - · Installing with database in a failover cluster.
 - · Installing with cloud databases.

To share your Applications with Printer Operators, install Web Printing.

When you complete your installation, activate your product.

2. System requirements, pre-installation, and post-installation checklist

Before you start your Control Center on-premises installation, check the necessary system requirements and perform a pre-checklist to avoid any problems during and after your installation.

Pre-installation checklist

Available access to the Windows accounts with administrative privileges and SQL system administrator



WARNING

When installing NiceLabel software to **multiple servers**, manage all servers through **the** same Windows domain.

Install NiceLabel software with administrative privileges:



NOTE

If the Windows user account you use to install Control Center has administrative privileges also on the Windows computer with SQL Server and the SQL Server itself, then you need just this one user name/password (and you can skip steps 2. and 3.).

- On the Windows server with Internet Information Services role where you install Control Center website.
- On the Windows server with Microsoft SQL Server role where you install your Control Center
 database, so you can add the users EPM_DBADMIN and EPM_USER as local Windows users. The
 provided Windows account must be a domain user (not a local Windows user) and must be a
 member of the local user group Administrators.
- 3. On the **SQL Server**, so you can add the Control Center database to the SQL Server. The entered user must have the sysadmin server role defined on the SQL server. This must be an **SQL user name**, usually "sa".

Internet access for the activation process

You need an Internet connection to activate Control Center. You don't need an Internet connection to the Windows Server where you installed your Control Center.

Prerequisites for the Microsoft SQL Server

- The Control Center database requires that you install SQL Server with case-insensitive collation.
- Enable the SQL Server Browser service, if you use instance names. This makes the instances visible to external clients.
- Enable the TCP/IP protocol for your SQL Server, if you install the SQL Server on a different machine
 than the Control Center Web page. Start SQL Server Configuration Manager, expand SQL Server
 Network Configuration and enable the TCP/IP for your server/instance.
- Enable the inbound connection towards the SQL Server. Start Windows Firewall with Advanced Security and add a new Inbound Rule to allow the program sqlservr.exe to accept incoming connections. You can find the program in the folder C:\Program Files\Microsoft SQL Server\MSSQL<version_number>.SQLEXPRESS\MSSQL\Binn.
- If the RPC port on the server that hosts your SQL database is blocked, the installation of your Control Center fails. Check that the RPC port on your SQL server is open. The RPC port number is usually 135 or 445, depending on your system configuration.

Installing Control Center on a Windows Server with enabled Remote Desktop Services (Terminal Services) role

Switch the Remote Desktop Server to Install mode before you install the applications on the server.

- 1. Open Control Panel.
- 2. Select Programs.
- 3. Select Install Application on Remote Desktop Server.
- 4. Browse for the installation executable, click **OK** and follow on-screen instructions.



NOTE

This tool is available only when installing the terminal server. It automatically puts the terminal server into execute mode when application installation is complete.

Port 8080 TCP availability on the computer where you intend to install the Control Center

Verify that the port 8080 TCP is not in use by some other application running on the same computer. NiceLabelControl Center occupies port 8080 to allow WebDAV access to the storage in **Documents**. If the port is already in use, choose some other port for **Documents** Server WebDAV communication. Enable the sysadmin server role defined on the SQL server to the entered user.

You can run Windows command-line utility netstat.exe to see a list of open ports on your computers.

- 1. Open Command Prompt window.
- 2. Enter the following command:

```
netstat -ano
```

3. If you see that port 8080 is already in use, choose another port for Control Center, so you do not disrupt the existing application.

Allow HTTP verbs to enable WebDAV

Make sure that the following HTTP verbs are enabled on your Control Center server.

- HEAD
- OPTIONS

Read more information about HTTP verbs in Microsoft Documentation.

Post-installation checklist

Open ports in the firewall

Allow the following inbound communication:

- **80 TCP**: Inbound connections to the Control Center. The browsers on the workstations open the Control Center page.
- 8080 TCP. Inbound connection to the Document Storage (WebDAV usage). You can choose a
 different port during the installation.
- 6773 TCP.NiceLabel Proxy Service. Connection for application management streams and licensing.

If you use HTTPS traffic (SSL/TLS), enable it for all sites

To encrypt the traffic between NiceLabel clients and NiceLabel Control Center, enable HTTPS protocol for both sites, where NiceLabelControl Center runs:

- Default Web Site: Exposes the connection to the main Control Center UI.
- EPMWebDav: Enables integration of document storage in NiceLabel clients through WebDAV protocol.

If you enable HTTPS support, disable HTTP traffic. The clients cannot use both protocols at the same time. Remove binding to the HTTP protocol for both sites in IIS.

Enable full access permissions to the NiceLabel System folder

NiceLabel client requires full access (read, write, delete) to the System folder.

The system folder is at this location:

%PROGRAMDATA%\NiceLabel\NiceLabel <version>\

This is usually not an issue, because folder %PROGRAMDATA% has write permission by default.

Open ports in the firewall

If you use Windows Firewall and it is running, installation adds the exceptions to the list of allowed incoming connections. If Windows Firewall is off, the exceptions are not added automatically. If you use another firewall, configure it manually.

- **56416 TCP**: Incoming connection from the Control Center to NiceLabelAutomation service that allows remote management of Automation service.
- 6772 TCP.NiceLabel Proxy Service. Connection for application management streams and licensing.

Support for WebDAV to use files in the Document Storage

Install the WebDAV support to each machine that needs to access data inside a Document Storage repository. Windows desktop OS (Windows 8, Windows 8.1, and Windows 10) has WebDAV support already installed. Add the WebDAV support for Windows Server OS manually. To enable WebDAV in Windows Server OS, see our Knowledge Base article.



NOTE

The "clients" are not only the NiceLabelDesigner applications but any software accessing the storage in Documents, including NiceLabelAutomation or even File Explorer.

If you use a proxy server, exclude local traffic from proxy

Bypass proxy server for local addresses or the client might not get the license from the NiceLabelControl Center, and files in Document Storage are not available. For more information see the Knowledge Base article.

Add Control Center to the Trusted sites

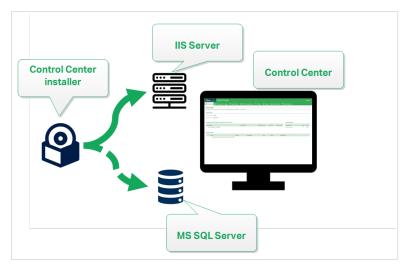
Add NiceLabelControl Center to the list of **Trusted Sites** in your browser. This will allows the Document Storage plugin to run in your browser.

3. Simple installations on single computers

Installing Control Center on a single computer allows you to operate your labeling environment as a centralized stand-alone system. If you run a small business, or if you want to evaluate the Control Center before starting a large-scale deployment, a single computer installation may be all you need to see the benefits of a controlled labeling system.

Installing Control Center should take less than 10 minutes.

- You can install Control Center on a computer that does not have a SQL database installed. NiceLabel
 installs the SQL database for you in this case.
- · You can install Control Center on a computer with a SQL database already set up.



Simple installation on a single computer

3.1. Requirements for simple installation on a single computer



IMPORTANT

Before you start, make sure that your system meets the requirements listed in the System Requirements article.

Read also the pre-installation NiceLabel checklist.



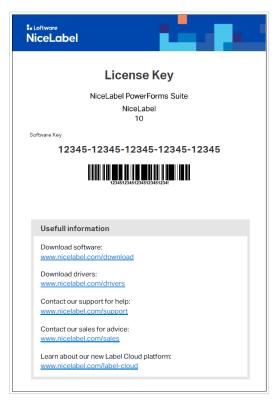
NOTE

To install Control Center on your computer, you must be logged in as the Administrator.

You can install Control Center by:

- Clicking the download link in the email that you received after purchasing the Label Management System.
- · Running your NiceLabel installation DVD.

After you finish your installation, you need the license key to activate your Control Center. When done, the NiceLabel sales team sends you an email that contains your license key.



The email with your activation key

After you finish your on-premises installation, activate your Control Center.

3.2. Installing on a single clean computer

This section explains how you install Control Center on a computer that has neither NiceLabel software nor databases installed.

Before you start installing the Control Center, meet the following requirements:

 You must be logged on to your computer as the administrator. If you are the only user on your computer, you are probably also the administrator. Have your NiceLabel license key ready for activating the Control Center. You can complete the
installation without your license key, but you cannot start working with Control Center unless you
activate your license.



TIP

NiceLabel recommends accepting all the defaults that Control Center installer offers. This is how you enable your Control Center to automatically configure itself on your computer. This includes installing the SQL database and configuring the IIS.

3.2.1. Starting Control Center installer

- 1. Close all open applications on your computer.
- After receiving your purchase confirmation email from NiceLabel, click the included link to download the Control Center installation file. The alternative option is to insert your NiceLabel DVD.



TIP

If the DVD application menu does not start automatically, double-click Start.exe and select Install Nice LMS > Control Center.

- 3. Installation checks the installation package content. Start the installation.
- 4. Select your Control Center installer language. Click **OK**. The installer now checks if your computer is properly configured.

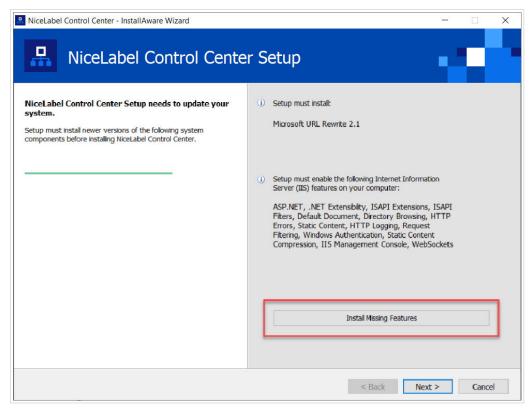


Selecting your setup language

- 5. Accept the license agreement. Click Next.
- 6. Select the installation destination folder. Click Next.

3.2.2. Enabling Internet Information Services (IIS)

Enable Internet Information Services to install your Control Center.



Enabling Internet Information Services (IIS)



NOTE

If you don't see the **Enable Missing IIS Features** button, your computer is already properly configured. Continue with your installation.

The Control Center installer checks if the required .NET framework and IIS features are available and properly configured on your computer.

If the Control Center installer finds missing features, the **Enable Missing IIS Features** button appears automatically.

- Click the Enable Missing IIS Features button and the Control Center installer enables the missing .NET framework and IIS features for you.
- 2. Accept the license agreement terms.
- 3. Click **Next** to configure your website and storage settings.

3.2.3. Setting up website and storage access

In Control Center you centrally store your labeling files (label templates, graphics, Solutions) in **Documents**. Set up access to your Control Center storage in **Documents** and make your Control Center connections with other NiceLabel applications secure.

 This step is optional. Select HTTPS support to establish a secure client-server connection.
 NiceLabel recommends you secure your Control Center connections if the communication with clients uses open internet connections.



IMPORTANT

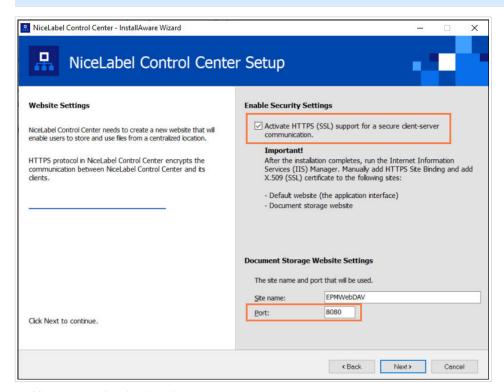
After completing the installation, use the IIS manager to manually add HTTPS site binding and X.509 (SSL) certificate to your selected site. If you do not complete this step, your Control Center does not open. The steps for adding HTTPS site binding and SSL certificate in IIS are described in section Section 5.1, "Adding HTTPS site binding and SSL certificate in IIS".

Define the WebDAV site settings. Type your site name and port number on which your site runs.
 This site is the WebDAV entry point into your Documents storage for all applications that work with files stored in your Documents. This site installs in the IIS on your current machine. NiceLabel recommends keeping the default settings.



IMPORTANT

Make sure your selected port number is not in use by a site in IIS or any other application on this computer.



Enabling HTTPS and setting the WebDAV port

Click Next. The installer checks if everything is OK and starts installing your Control Center.

3.2.4. Creating your database

Your Control Center requires a database that runs in the background. Because you don't have any SQL Server instances available on your clean computer yet, NiceLabel installs **Microsoft SQL Server Express** for you.

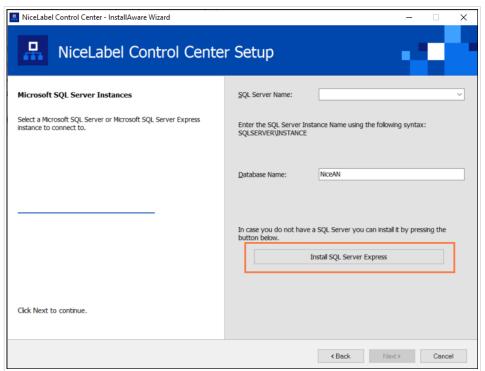


IMPORTANT

To let NiceLabel install the SQL Express on your computer, you must be logged on as an administrator.

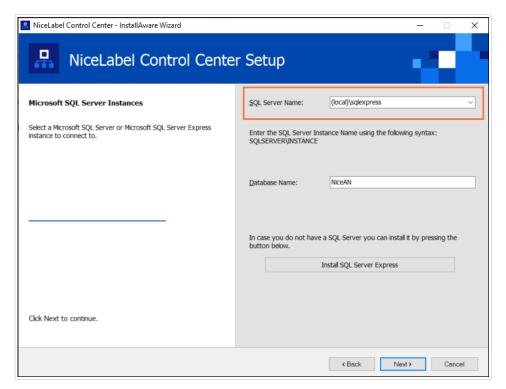
You also need internet access to install the SQL Server Express. This allows the installer to download all the necessary components.

Click Install SQL Server Express.



Installing SQL Express database

- Follow the SQL Server Express on-screen installation instructions.
 After you finish the SQL Server Express installation, resume with the installation of your Control Center.
- 3. Select your newly installed SQL Server instance.



The SQL Server Express installer sets your Instance Name to:

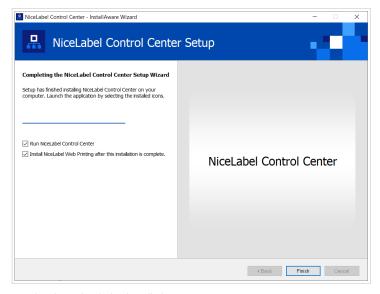
(local)\SQLEXPRESS

- 4. Click **Next**. The dialog for user setting changes opens. This is an optional step required for *advanced installation*. Ignore and click **Next**.
- Click Install. The installation continues.

3.2.5. Completing Control Center installation

Installing Web Printing site is optional. Before your browser launches and opens your Control
Center Dashboard page, you can also start the installation of your Web Printing site.

If the folder containing your Control Center installer also includes the installation file for Web
Printing, you can select Install NiceLabel Web Printing after this installation is complete. If your
installer does not find the Web printing installation file, this option is not visible to you.



Starting the Web Printing installation

Do this to share your Applications (labels and Solutions) from your Control Center within your company or with external business partners.

This opens the **Web Printing installer**. See section Installation steps for the **Web Printing** site for details on how to install your **Web Printing**.

2. Click Finish.

Your browser opens the Control Center **Dashboard** page.

The address of your Control Center is: http://yourcomputername/EPM.



IMPORTANT

Control Center cannot work properly with JavaScript disabled. If you are installing Control Center on a server, it is possible that due to security reasons, JavaScript is disabled by default. If there are no security issues, enable JavaScript in your browser and reload the page. Find more information in the How to enable JavaScript in Windows article.

If you experience any issues during the installation, please contact our NiceLabel support team at https://www.nicelabel.com/support.

Activate your Control Center with the key that you received via email after your purchase.

3.3. Installing on a computer that hosts the SQL Server

This section explains how you install the Control Center on a computer that already hosts your SQL Server.

Make sure you meet these requirements before you start installing the Control Center on your computer that already hosts an SQL database:

- You must be logged on to your computer as the administrator. If you are the only user on your computer, you are probably also the administrator.
- The account under which you are logged on must have a sysadmin role on the SQL database. This allows you to create a dedicated database for your Control Center.



NOTE

If you are logged in as administrator for both Windows and SQL, Control Center installs your database automatically.

Have your NiceLabel license key ready for activating the Control Center. You can complete the
installation without your license key, but you cannot start working with Control Center unless you
activate your license.

3.3.1. Starting Control Center installer

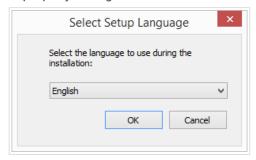
- 1. Close all open applications on your computer.
- After receiving your purchase confirmation email from NiceLabel, click the included link to download the Control Center installation file. The alternative option is to insert your NiceLabel DVD.



TIP

If the DVD application menu does not start automatically, double-click Start.exe and select Install Nice LMS > Control Center.

- 3. Installation checks the installation package content. Start the installation.
- 4. Select your Control Center installer language. Click **OK**. The installer now checks if your computer is properly configured.

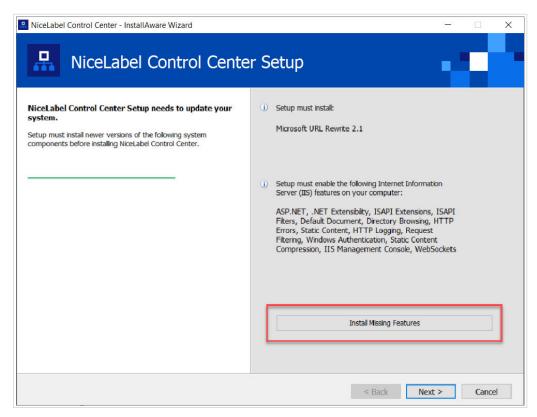


Selecting your setup language

- 5. Accept the license agreement. Click Next.
- 6. Select the installation destination folder. Click **Next**.

3.3.2. Enabling Internet Information Services (IIS)

Enable Internet Information Services to install your Control Center.



Enabling Internet Information Services (IIS)



NOTE

If you don't see the **Enable Missing IIS Features** button, your computer is already properly configured. Continue with your installation.

The Control Center installer checks if the required .NET framework and IIS features are available and properly configured on your computer.

If the Control Center installer finds missing features, the **Enable Missing IIS Features** button appears automatically.

- Click the Enable Missing IIS Features button and the Control Center installer enables the missing .NET framework and IIS features for you.
- 2. Accept the license agreement terms.
- Click Next to configure your website and storage settings.

3.3.3. Setting up website and storage access

In Control Center you centrally store your labeling files (label templates, graphics, Solutions) in **Documents**. Set up access to your Control Center storage in **Documents** and make your Control Center connections with other NiceLabel applications secure.

 This step is optional. Select HTTPS support to establish a secure client-server connection.
 NiceLabel recommends you secure your Control Center connections if the communication with clients uses open internet connections.



IMPORTANT

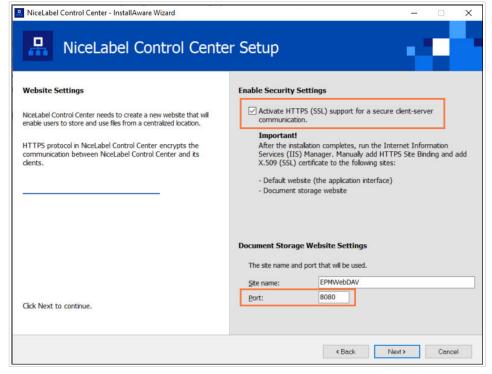
After completing the installation, use the IIS manager to manually add HTTPS site binding and X.509 (SSL) certificate to your selected site. If you do not complete this step, your Control Center does not open. The steps for adding HTTPS site binding and SSL certificate in IIS are described in section Section 5.1, "Adding HTTPS site binding and SSL certificate in IIS".

Define the WebDAV site settings. Type your site name and port number on which your site runs.
 This site is the WebDAV entry point into your Documents storage for all applications that work with files stored in your Documents. This site installs in the IIS on your current machine. NiceLabel recommends keeping the default settings.



IMPORTANT

Make sure your selected port number is not in use by a site in IIS or any other application on this computer.



Enabling HTTPS and setting the WebDAV port

3. Click Next. The installer checks if everything is OK and starts installing your Control Center.

3.3.4. Connecting to SQL database

Your Control Center requires a database. This is why you must select an existing SQL Server instance on your computer and connect to a dedicated database.



IMPORTANT

Before you start with this step, make sure you have all the required users for Control Center database ready.

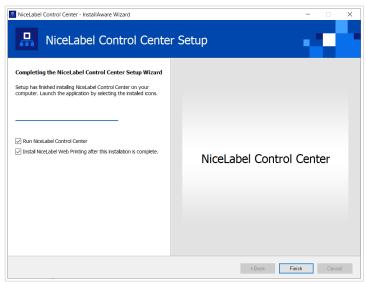
The installer automatically searches for the available SQL instances and lists them on the drop-down list.

- 1. Select your **SQL Server instance** from the drop-down list or type in the name of your SQL Server instance using the following syntax: **SQLSERVER\INSTANCE**.
- 2. By default, the **Database name** is set to **NiceAN**. NiceLabel recommends keeping the default database name for easier communication with our support team.
- 3. Click **Next**. The dialog for user setting changes opens. This is an optional step required for *advanced installation*. Ignore and click **Next**.
- 4. Click Install. The installation continues.

3.3.5. Completing Control Center installation

Installing Web Printing site is optional. Before your browser launches and opens your Control
Center Dashboard page, you can also start the installation of your Web Printing site.

If the folder containing your Control Center installer also includes the installation file for Web
Printing, you can select Install NiceLabel Web Printing after this installation is complete. If your
installer does not find the Web printing installation file, this option is not visible to you.



Starting the Web Printing installation

Do this to share your Applications (labels and Solutions) from your Control Center within your company or with external business partners.

This opens the **Web Printing installer**. See section Installation steps for the **Web Printing** site for details on how to install your **Web Printing**.

2. Click Finish.

Your browser opens the Control Center Dashboard page.

The address of your Control Center is: http://yourcomputername/EPM.



IMPORTANT

Control Center cannot work properly with JavaScript disabled. If you are installing Control Center on a server, it is possible that due to security reasons, JavaScript is disabled by default. If there are no security issues, enable JavaScript in your browser and reload the page. Find more information in the How to enable JavaScript in Windows article.

If you experience any issues during the installation, please contact our NiceLabel support team at https://www.nicelabel.com/support.

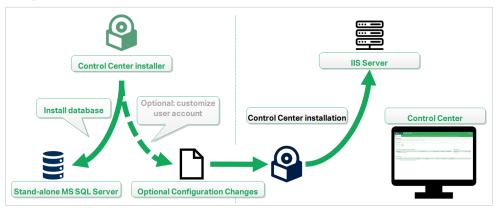
Activate your Control Center with the key that you received via email after your purchase.

4. Advanced installations

Large-scale deployments of Control Center require sufficient processing capabilities and increased availability of your stored data. This calls for an installation, where your Control Center application and its database run on separate machines.

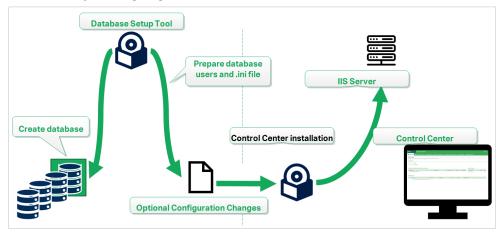
There are three advanced Control Center installation scenarios:

 Installing with a stand-alone SQL Server. Use this installation procedure if you have an existing stand-alone server that hosts your SQL Server, and plan to run the Control Center on a separate computer.



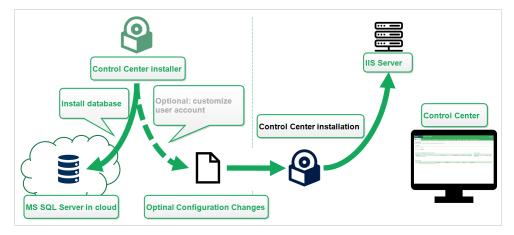
Installing with a stand-alone SQL Server

• Installing Control Center with database in a failover cluster. If labeling is a mission-critical business process for your company, you might want to ensure a high availability operation of your database. In this case, you are going to run the Control Center's database in a failover cluster.



Installing with database in a failover cluster

• Section 4.6, "Installing with cloud databases". If your company uses cloud infrastructure, you can install your Control Center's database in your cloud.



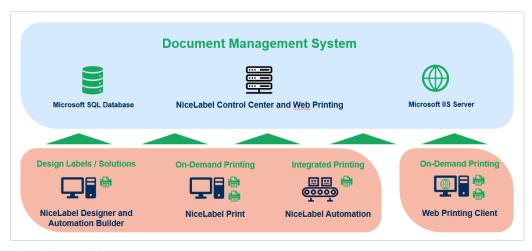
Installing with cloud database

4.1. Control Center components in Label Management System (LMS)

Control Center represents the core of NiceLabel LMS which allows you to create a **multi-user labeling environment**.

These are the server-side NiceLabel LMS components:

- Control Center web application. This is the main Control Center software component that runs on Microsoft Internet Information Services (IIS) using the .NET platform.
- Web Printing allows you to share your labels and Solutions stored in Control Center's **Documents** with your internal or with external users. The installation of Web Printing is optional.
- Database back-end where Microsoft SQL Server hosts your Control Center's database.



NiceLabel LMS architecture

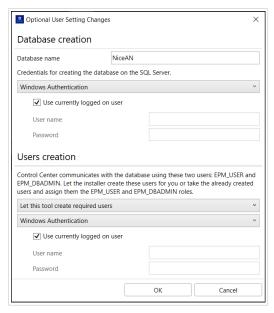
In an LMS environment, your Control Center cooperates with these modules:

• NiceLabel Designer is a label template and Solution designer.

- NiceLabel Print enables label printing without giving the print operator access to label design.
- NiceLabel Automation helps you deploy and run automated label printing systems by synchronizing business events with label production.
- Web Printing web application and Web Client enable your users to work with your shared Applications (label templates and Solutions) stored the Control Center **Documents** storage.

4.2. Choosing the user account for database creation

While installing your Control Center, you might learn that your current account doesn't have sufficient privileges to create your database and required users on the server that hosts your SQL Server instance. In this case, your Control Center installer offers you **Optional User Setting Changes**. These settings allow you to change your current user account under which you are trying to create your Control Center database or the required EPM_USER.



The Optional User Setting Changes window

Configure Optional User Setting Changes in two cases:

- You are currently logged with a user account with insufficient privileges for creating your database and the required users on your SQL Server instance.
- You are planning to use the existing Windows or SQL users as your EPM_USER or EPM_DBADMIN users.

Learn more about the required users for installing Control Center in the section Identifying the required users.

Use the **Optional User Setting Changes** to create or edit the required users for database management, and for the communication between your Control Center and its database.

Define the user that creates the database on the selected SQL Server instance. There are two
options:

• Use the currently logged-on user. This is the Windows local or domain user under which you are installing the Control Center.



NOTE

You can use the Windows local user if the SQL Server runs locally on your machine. If the SQL Server runs on another machine within your domain, use a domain Windows user.

 You can specify another user that creates the database. This can either be a Windows or a SQL user. Define this using your selected Authentication type.



IMPORTANT

Whichever option you choose, the user must have the sysadmin role on your SOL Server instance.

- 2. Create users EPM_USER (to read the data) and EPM_DBADMIN (to own the database). There are two options to create these two users:
 - Automatically. The Control Center installer creates these two users for you. If you select this
 option, the installer creates EPM_USER and EPM_DBADMIN users as Windows users.
 - b. **Manually**. You can manually create the EPM_USER and EPM_DBADMIN users on your system before the installation. You can also use other existing Windows or SQL users to perform the roles of EPM_USER and EPM_DBADMIN users.

Read how to configure the manually created EPM users in the section Configuring securables for custom database users.

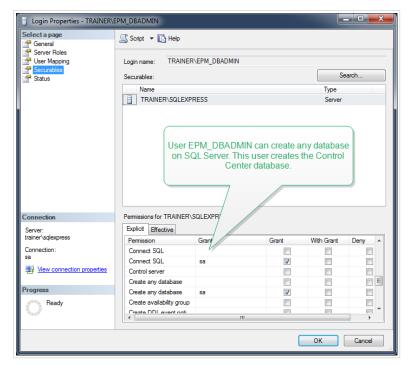
- If you select Windows Authentication, define the names of the predefined Windows
 users that take the EPM_USER and EPM_DBADMIN roles. Keep the default names to
 let the dedicated EPM users take these two roles, or type the name of other existing
 Windows users that take the roles instead.
- If you select SQL Authentication, define the existing SQL users that take the EPM_USER and EPM_DBADMIN roles.

4.3. Creating and configuring the database users

To complete the installation, your Control Center installer requires two database users:

- EPM_DBADMIN user to install the database. This user also owns the database.
- EPM_USER to get access to the database and to enable the communication with your Control Center.

When creating the EPM users manually, your first option is to use **Windows** or **SQL user account**. The instructions below apply to both user types.



Configuring the database users

• EPM_DBADMIN: Assign this user the following two roles: Connect SQL and Create any database.



IMPORTANT

Define these roles before you start installing the database.

• **EPM_USER**: Control Center application imitates this user during every interaction with your database. Your user is mapped to this database only.



NOTE

You can rename your EPM_DBADMIN and EPM_USERS.

Additionally, your database user must be configured with additional permissions for your database (the default database name is NiceAN).

4.4. Installing with database on a stand-alone SQL server

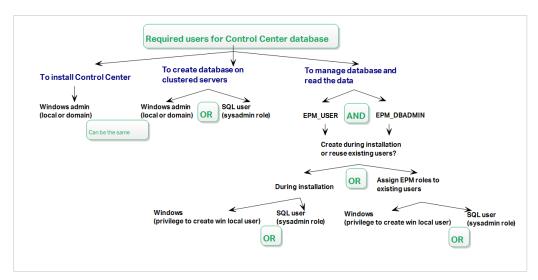
In this scenario, you have a stand-alone server that hosts your SQL Server and you plan to run the Control Center application on a separate server.

Complete these 2 phases:

- 1. Phase 1. Identify the required Windows and database users.
- 2. Phase 2. Install the Control Center application and set up your database connection.

4.4.1. Phase 1: Identifying the required users

To install and deploy the Control Center that works with a database that runs on a separate server, server cluster, or cloud server, have your required authorized users ready:



The required users for Control Center database

1. **Sysadmin**. To create your Control Center database on the server that hosts your SQL Server instance, you need a system administrator or SQL user with administrative privileges.



NOTE

You can use **Advanced installation** > **DBTool** (Database Setup Tool installer) to create your Control Center database. In this case you don't need sysadmin privileges. A user that creates Control Center database must be a **dbowner** or a **member of dbowner** role. See detailed instructions about DBTool in the **Creating** your database in a failover cluster topic.

- EPM_USER. A user (Windows or SQL) that enables the Control Center to read data from the database.
- EPM_DBADMIN. A user (Windows or SQL) that owns the database.
 There are two options to create EPM_USER and EPM_DBADMIN users:
 - a. **Automatically**. During the installation, your Control Center installer creates these two users for you.
 - b. **Manually**. Before the installation, you can manually add EPM_USER and EPM_DBADMIN users in these two places:
 - · On your Windows system. In this case, the EPM users are Windows users.
 - On your SQL Server. In this case, the EPM users can either be Windows or SQL users.



NOTE

NiceAN is the default name for the Control Center database.

4. **Windows admin**. To install the Control Center on the dedicated server, you need a Windows local or domain user with administrative privileges.

4.4.2. Phase 2: Installing the Control Center application with a stand-alone SQL Server

Before you start installing the Control Center, meet the following requirements:

- You must be logged on to your computer as the administrator. If you are the only user on your computer, you are probably also the administrator.
- Have your NiceLabel license key ready for activating the Control Center. You can complete the
 installation without your license key, but you cannot start working with Control Center unless you
 activate your license.



TIP

NiceLabel recommends accepting all the defaults that Control Center installer offers. This is how you enable your Control Center to automatically configure itself on your computer. This includes installing the SQL database and configuring the IIS.

4.4.2.1. Starting Control Center installer

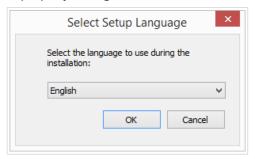
- 1. Close all open applications on your computer.
- After receiving your purchase confirmation email from NiceLabel, click the included link to download the Control Center installation file. The alternative option is to insert your NiceLabel DVD.



TIP

If the DVD application menu does not start automatically, double-click Start.exe and select Install Nice LMS > Control Center.

- 3. Installation checks the installation package content. Start the installation.
- Select your Control Center installer language. Click OK. The installer now checks if your computer is properly configured.

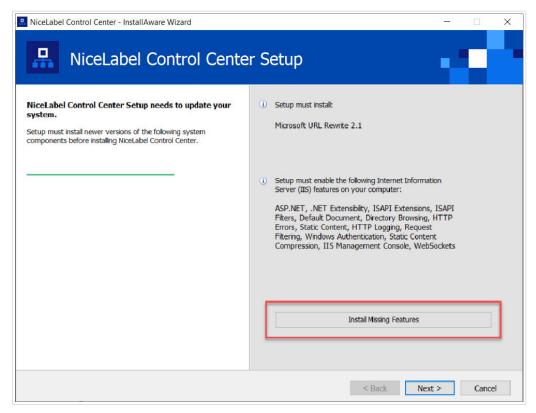


Selecting your setup language

- 5. Accept the license agreement. Click Next.
- 6. Select the installation destination folder. Click Next.

4.4.2.2. Enabling Internet Information Services (IIS)

Enable Internet Information Services to install your Control Center.



Enabling Internet Information Services (IIS)



NOTE

If you don't see the **Enable Missing IIS Features** button, your computer is already properly configured. Continue with your installation.

The Control Center installer checks if the required .NET framework and IIS features are available and properly configured on your computer.

If the Control Center installer finds missing features, the **Enable Missing IIS Features** button appears automatically.

- 1. Click the **Enable Missing IIS Features** button and the Control Center installer enables the missing .NET framework and IIS features for you.
- 2. Accept the license agreement terms.

3. Click **Next** to configure your website and storage settings.

4.4.2.3. Setting up website and storage access

In Control Center you centrally store your labeling files (label templates, graphics, Solutions) in **Documents**. Set up access to your Control Center storage in **Documents** and make your Control Center connections with other NiceLabel applications secure.

This step is optional. Select HTTPS support to establish a secure client-server connection.
 NiceLabel recommends you secure your Control Center connections if the communication with clients uses open internet connections.



IMPORTANT

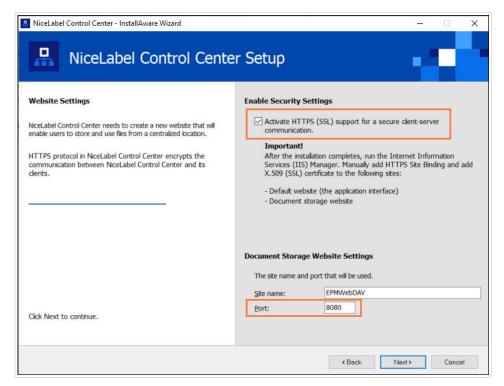
After completing the installation, use the IIS manager to manually add HTTPS site binding and X.509 (SSL) certificate to your selected site. If you do not complete this step, your Control Center does not open. The steps for adding HTTPS site binding and SSL certificate in IIS are described in section Section 5.1, "Adding HTTPS site binding and SSL certificate in IIS".

Define the WebDAV site settings. Type your site name and port number on which your site runs.
 This site is the WebDAV entry point into your Documents storage for all applications that work with files stored in your Documents. This site installs in the IIS on your current machine. NiceLabel recommends keeping the default settings.



IMPORTANT

Make sure your selected port number is not in use by a site in IIS or any other application on this computer.



Enabling HTTPS and setting the WebDAV port

3. Click **Next**. The installer checks if everything is OK and starts installing your Control Center.

4.4.2.4. Creating a database on stand-alone SQL Server

Your Control Center requires a database. This is why you must select an existing SQL Server instance on your server and create a dedicated database in this step.

Before you start with this installation, make sure you have all the required users from Phase 1 ready.

- 1. Select the SQL Server instance from the drop-down menu or type in the name of your SQL Server instance using the following syntax: SQLSERVER\INSTANCE.
- Enter your Database name. NiceLabel recommends you keep the default name NiceAN. This makes potential future communication with NiceLabel support team easier.
- 3. Click **Next**. If you set the required users in Phase 1 properly, Control Center installer creates the database and the required users automatically and proceeds to the next step.



NOTE

By default, Control Center installer always tries to create the database and the required users under the user account you are currently logged into. If Control Center installer discovers that your account is missing privileges for the selected SQL Server instance, the installation asks you to log in as a user that has the required set of privileges.

If your installer can't proceed, here are three possible reasons:

- a. Your account is missing the privilege to create a database. The installer is trying to create a database while you are logged on as a user without sufficient privileges. Because the installer cannot continue, a window opens for you to log on as a Windows or a SQL user with a sysadmin role on your SQL Server instance.
- b. Your account is missing the privilege to create users. The installer is trying to create the EPM_USER and EPM_DBADMIN Windows users on the database server, and to set their access privileges. At this moment, the installer discovers that your account lacks the privilege to complete these two actions. As a result, the installer cannot continue and opens a window for you to log on as a Window or SQL user with granted "create user" privilege.
- c. Your account is missing both privileges to create a database and to create users. In this case, Control Center installer discovers that your account lacks privileges to create your database and to create the required users. A dialog opens allowing you to log on using a user name and a password that allow you to create the database and required users.

To customize the user account under which the installer creates the database, and the required users, open the **Optional User Setting Changes**.



NOTE

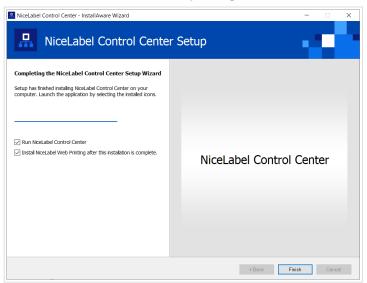
If you still cannot proceed, contact your local system administrator to identify the required users.

4. Click **Next**. The installer checks if everything is OK and installs your Control Center. If the credentials issue persists, the login dialog appears automatically.

4.4.2.5. Completing Control Center installation

Installing Web Printing site is optional. Before your browser launches and opens your Control
Center Dashboard page, you can also start the installation of your Web Printing site.

If the folder containing your Control Center installer also includes the installation file for Web
Printing, you can select Install NiceLabel Web Printing after this installation is complete. If your
installer does not find the Web printing installation file, this option is not visible to you.



Starting the Web Printing installation

Do this to share your Applications (labels and Solutions) from your Control Center within your company or with external business partners.

This opens the **Web Printing installer**. See section Installation steps for the **Web Printing** site for details on how to install your **Web Printing**.

2. Click Finish.

Your browser opens the Control Center **Dashboard** page.

The address of your Control Center is: http://yourcomputername/EPM.



IMPORTANT

Control Center cannot work properly with JavaScript disabled. If you are installing Control Center on a server, it is possible that due to security reasons, JavaScript is disabled by default. If there are no security issues, enable JavaScript in your browser and reload the page. Find more information in the How to enable JavaScript in Windows article.

If you experience any issues during the installation, please contact our NiceLabel support team at https://www.nicelabel.com/support.

Activate your Control Center with the key that you received via email after your purchase.

4.5. Installing with database in a failover cluster

In comparison to a single-server database configuration, running the Control Center database in a failover cluster makes sure that your data is accessible even in case of a server failure.



NOTE

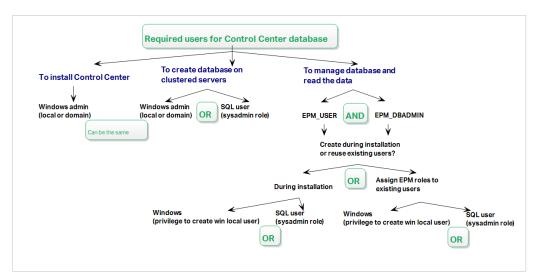
For instruction on how to complete the SQL Server Failover Cluster Installation, please visit the dedicated Microsoft web page.

Complete these 3 installation phases to ensure high availability for your Control Center:

- 1. Phase 1. Identify the required Windows and database users.
- 2. Phase 2. Create and configure the database on your failover cluster.
- 3. Phase 3. Install your Control Center application and connect your Control Center to the database that runs on the clustered servers.

4.5.1. Phase 1: Identifying the required users

To install and deploy the Control Center that works with a database that runs on a separate server, server cluster, or cloud server, have your required authorized users ready:



The required users for Control Center database

1. **Sysadmin**. To create your Control Center database on the server that hosts your SQL Server instance, you need a system administrator or SQL user with administrative privileges.



NOTE

You can use **Advanced installation** > **DBTool** (Database Setup Tool installer) to create your Control Center database. In this case you don't need sysadmin privileges. A user that creates Control Center database must be a **dbowner** or a **member of dbowner** role. See detailed instructions about DBTool in the Creating your database in a failover cluster topic.

- EPM_USER. A user (Windows or SQL) that enables the Control Center to read data from the database.
- EPM_DBADMIN. A user (Windows or SQL) that owns the database.
 There are two options to create EPM_USER and EPM_DBADMIN users:
 - Automatically. During the installation, your Control Center installer creates these two users for you.
 - b. **Manually**. Before the installation, you can manually add EPM_USER and EPM_DBADMIN users in these two places:
 - · On your Windows system. In this case, the EPM users are Windows users.
 - On your SQL Server. In this case, the EPM users can either be Windows or SQL users.



NOTE

NiceAN is the default name for the Control Center database.

4. **Windows admin**. To install the Control Center on the dedicated server, you need a Windows local or domain user with administrative privileges.

4.5.2. Phase 2: Creating your database in a failover cluster

Before you start creating Control Center's database on your failover cluster, meet the following requirements:

- To install the Control Center database, you need an **administrative account for the SQL Server**. You can be logged on as:
 - A Windows user, set up as the SQL administrator. See the Logins section in the SQL Server Management Studio.
 - A **SQL** user account with permissions to create a database, such as the "sa" user.



NOTE

By using **Advanced installation** > **DBTool** (Database Setup Tool installer) you don't need **sysadmin** privileges. User that creates Control Center database must be a **dbowner** or a **member of dbowner** role.

- Make sure your SQL Server cluster is configured correctly. Please refer to the Microsoft user documentation that covers the installation and configuration of SQL Server.
- Have your Database Setup Tool installer ready. To locate the Database Setup Tool installer, open the Advanced installation folder in your NiceLabel installation folder or DVD.
 Database Setup Tool is a utility tool that enables you to:
 - · Create and manage the database on your SQL Server.
 - · Create and manage the required database users.



IMPORTANT

When you run your Database Setup Tool, the tool creates an .ini file. You need the .ini file to store your database configuration settings. These settings enable you to install your Control Center application.

- 1. Create your database in the failover cluster from the server on which you are also installing your Control Center. Log on to this server.
- 2. Copy the folder Install\DBTool from your installation files (or DVD) to your local disk. This folder includes the Database Setup Tool.
- 3. Double click ${\tt DBToolSFX}$. exe to run your Database Setup Tool. Go to Server Information.
 - SQL Server name is the name of the SQL Server instance on which you create your Control Center database. By default, the Database Setup Tool names your instance as SERVER\SQLSERVER.

- Database name is the name of the database you are creating. NiceLabel recommends you
 to keep the default name NiceAN for potential future communication with NiceLabel support
 team.
- Select your Authentication type. You can create your database by logging on as a Windows or as a SQL user.



IMPORTANT

No matter which authentication type you choose, your user account must have sysadmin privileges on the SQL Server.

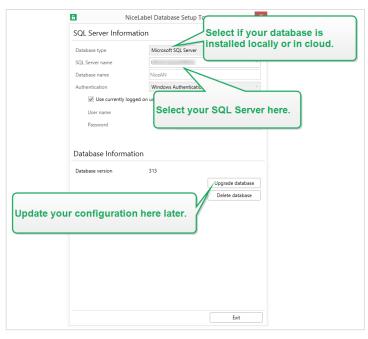
- If you decide to use **Windows authentication**, you have two options. In both cases, your account needs **Windows domain administrative privileges** and **SQL sysadmin role**.
 - Select Use currently logged on user if you are currently logged as a Windows user with sufficient privileges.
 - You can use another Windows account if your current user account has insufficient privileges.



NOTE

Make sure you use the DOMAIN\USER syntax.

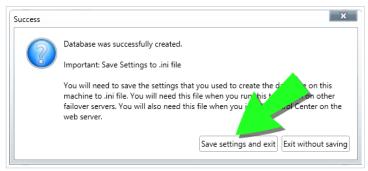
• If you decide to use **SQL Server authentication**, provide a user, defined in the SQL Server that has a sysadmin role. This is usually the sa user.



Working with the Database Setup Tool

- 4. To define the database users, go to **Database Information**.
 - Users creation selects how you are going to define the required database users.

- To let the Database Setup Tool automatically create the required users for you, accept the default Create EPM_USER and EPM_DBADMIN option.
- To give your created users EPM roles, select I have created the users myself.
- In both cases, you can use Windows or SQL Server authentication.
- 5. Click Create database. A confirmation window appears.
- 6. Click Save settings and exit. Your File Explorer opens.



Saving the database settings



WARNING

Keep the .ini file in a secure location. This file contains sensitive configuration settings that could compromise the security of your labeling system.

Store your .ini configuration file on a USB key or at an accessible location on your network.

Certain companies require regular database configuration changes. In most cases, such changes are part of regular security updates. To change the database configuration:

- a. Click Update installation configuration.
- b. A new window opens. Choose what to upgrade.

4.5.3. Phase 3: Installing the Control Center application

Before you start installing the Control Center, meet the following requirements:

- You must be logged on to your computer as the administrator. If you are the only user on your computer, you are probably also the administrator.
- Have your NiceLabel license key ready for activating the Control Center. You can complete the
 installation without your license key, but you cannot start working with Control Center unless you
 activate your license.



TIP

NiceLabel recommends accepting all the defaults that Control Center installer offers. This is how you enable your Control Center to automatically configure itself on your computer. This includes installing the SQL database and configuring the IIS.

4.5.3.1. Storing installer and .ini file in the same folder

- 1. Create a dedicated Control Center installation folder on your computer.
- 2. Copy the Control Center installer file to the dedicated folder.
- 3. Copy your .ini file to the folder.



Control Center installer and .ini files in the same folder



WARNING

Keep the copy of your. ini file in a secure location. This file contains sensitive configuration settings that could compromise the security of your labeling system.

The Control Center installer uses your .ini file to automatically configure the clustered database connections.

4.5.3.2. Starting Control Center installer

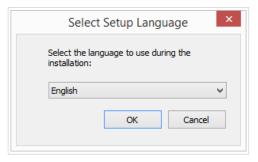
- 1. Close all open applications on your computer.
- After receiving your purchase confirmation email from NiceLabel, click the included link to download the Control Center installation file. The alternative option is to insert your NiceLabel DVD.



TIP

If the DVD application menu does not start automatically, double-click Start.exe and select Install Nice LMS > Control Center.

- 3. Installation checks the installation package content. Start the installation.
- 4. Select your Control Center installer language. Click **OK**. The installer now checks if your computer is properly configured.

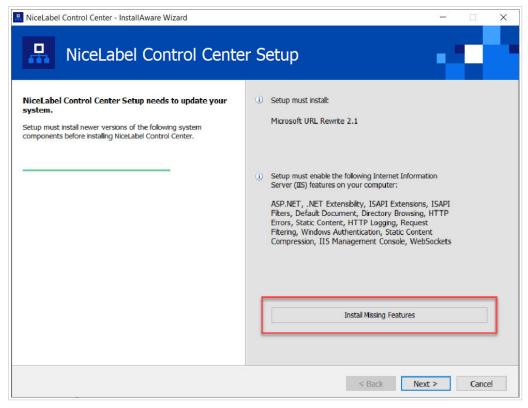


Selecting your setup language

- 5. Accept the license agreement. Click Next.
- 6. Select the installation destination folder. Click **Next**.

4.5.3.3. Enabling Internet Information Services (IIS)

Enable Internet Information Services to install your Control Center.



Enabling Internet Information Services (IIS)



NOTE

If you don't see the **Enable Missing IIS Features** button, your computer is already properly configured. Continue with your installation.

The Control Center installer checks if the required .NET framework and IIS features are available and properly configured on your computer.

If the Control Center installer finds missing features, the **Enable Missing IIS Features** button appears automatically.

- 1. Click the **Enable Missing IIS Features** button and the Control Center installer enables the missing .NET framework and IIS features for you.
- 2. Accept the license agreement terms.
- 3. Click **Next** to configure your website and storage settings.

4.5.3.4. Setting up website and storage access

In Control Center you centrally store your labeling files (label templates, graphics, Solutions) in **Documents**. Set up access to your Control Center storage in **Documents** and make your Control Center connections with other NiceLabel applications secure.

This step is optional. Select HTTPS support to establish a secure client-server connection.
 NiceLabel recommends you secure your Control Center connections if the communication with clients uses open internet connections.



IMPORTANT

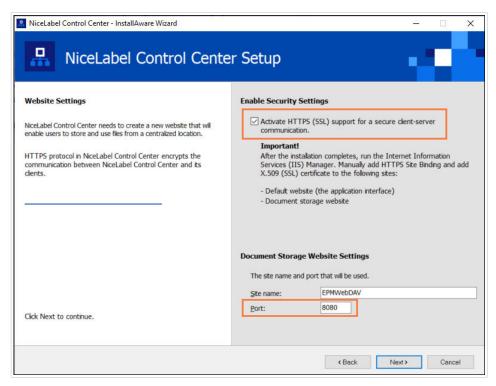
After completing the installation, use the IIS manager to manually add HTTPS site binding and X.509 (SSL) certificate to your selected site. If you do not complete this step, your Control Center does not open. The steps for adding HTTPS site binding and SSL certificate in IIS are described in section Section 5.1, "Adding HTTPS site binding and SSL certificate in IIS".

Define the WebDAV site settings. Type your site name and port number on which your site runs.
 This site is the WebDAV entry point into your Documents storage for all applications that work with files stored in your Documents. This site installs in the IIS on your current machine. NiceLabel recommends keeping the default settings.



IMPORTANT

Make sure your selected port number is not in use by a site in IIS or any other application on this computer.



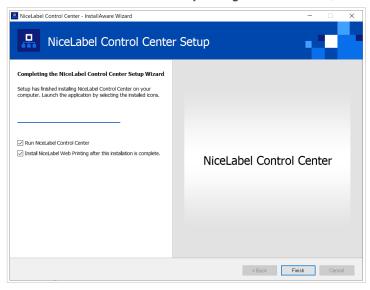
Enabling HTTPS and setting the WebDAV port

3. Click **Next**. The installer checks if everything is OK and starts installing your Control Center.

4.5.3.5. Completing Control Center installation

Installing Web Printing site is optional. Before your browser launches and opens your Control
Center Dashboard page, you can also start the installation of your Web Printing site.

If the folder containing your Control Center installer also includes the installation file for Web
Printing, you can select Install NiceLabel Web Printing after this installation is complete. If your
installer does not find the Web printing installation file, this option is not visible to you.



Starting the Web Printing installation

Do this to share your Applications (labels and Solutions) from your Control Center within your company or with external business partners.

This opens the **Web Printing installer**. See section Installation steps for the **Web Printing** site for details on how to install your **Web Printing**.

2. Click Finish.

Your browser opens the Control Center **Dashboard** page.

The address of your Control Center is: http://yourcomputername/EPM.



IMPORTANT

Control Center cannot work properly with JavaScript disabled. If you are installing Control Center on a server, it is possible that due to security reasons, JavaScript is disabled by default. If there are no security issues, enable JavaScript in your browser and reload the page. Find more information in the How to enable JavaScript in Windows article.

If you experience any issues during the installation, please contact our NiceLabel support team at https://www.nicelabel.com/support.

Activate your Control Center with the key that you received via email after your purchase.

4.6. Installing with cloud databases

You can install Control Center databases (NiceAN) on your local server, or install cloud databases. To install a cloud database, select it from the **Database type** drop-down menu on our Database Setup Tool during installation:

Microsoft SQL Server is your locally installed (on-premises) Control Center database. Select this
option to run your NiceAN database, Control Center, and its database locally.



NOTE

You can use Windows or SQL authentication to connect to the **Microsoft SQL Server** database.

- Microsoft Azure SQL Database is the database you install in your company's own Microsoft Azure cloud. Select this option to run Control Center locally and run its database on your Azure cloud.
- Microsoft Azure SQL Database Managed Instance is the database you install on your SQL server that runs on a virtual machine in Azure cloud.
- Amazon RDS is the database you run in your Amazon cloud.



NOTE

You can use SQL authentication for all three cloud-based database types.



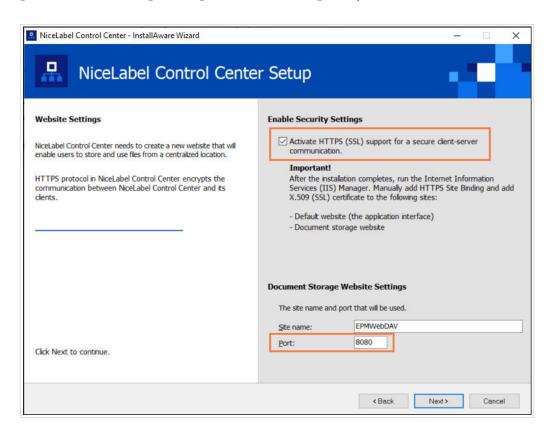
NiceLabel installs and maintains your database for you when you use Control Center databases in the NiceLabel Azure cloud (within the onnicelabel.com domain).

5. Security, updates, and migrations

Carefully consider your options, before you change accessibility to NiceLabel Cloud modules, update or migrate your Control Center or your database. Read our documentation and decide which scenario fits best for your needs.

5.1. Adding HTTPS site binding and SSL certificate in IIS

When you are planning to use your Control Center in an **open networking environment**, select **HTTPS support** while installing your Control Center for secure client-server communication. If you enable the **HTTPS support** option during the installation, your Control Center's address becomes https://yourservername/epm (<a href="https://becomes.https://).





TIP

For more information about the security of your printing environment, consult your coworkers responsible for the networking infrastructure in your company.

Before you can open and start working with your Control Center using a secure connection, configure your IIS.



If you do not have the IIS Manager installed on your computer, get it from Microsoft Download Center.

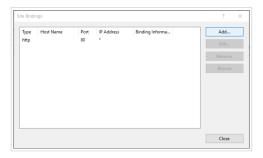
Instructions for the Default Web Site

- 1. Open your **IIS Manager**.
- 2. In the **Connection** panel on the left side of the window, expand the **"yourservername"** node, and expand the **Sites** node.



Configuring the Default Web Site

- 3. Select Default Web Site.
- 4. In the **Actions** panel on the right side of the window, click **Bindings**.
 - Site Bindings dialog opens. Click Add.



- 5. In the **Type** field, select https.
- 6. In the **Port** field, enter **443**.
- 7. In **SSL certificate**, select your certificate from the list. Click **View** to see the properties of your certificate.



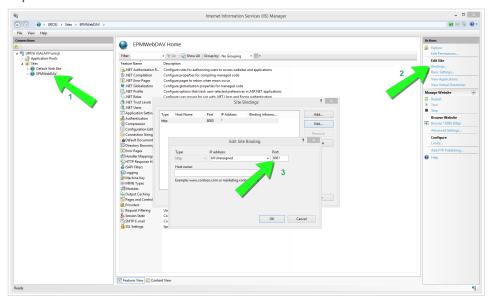
If you do not see the appropriate certificate on your list, install your certificate first. There are numerous instructions on how to install the certificate available on the Web.

8. Click **OK** and close the dialog.

You can now open the Control Center page via a secure connection. Notice that the URL of your Control Center now starts with https://. This is how you know that you properly set up the secure connection to your Control Center.

Instructions for the EPMWebDAV Site

- 1. Open your **IIS Manager**.
- 2. In the **Connection** panel on the left side of the window, expand the **"yourservername"** node, and expand the **Sites** node.

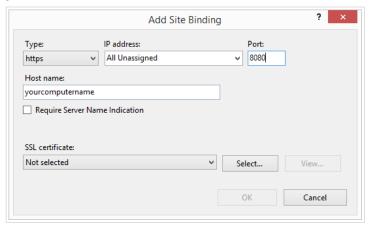


Configuring the EPMWebDAV

- 3. Select EPMWebDAV.
- 4. In the **Actions** panel on the right side of the window, click **Bindings**.
 - Site Bindings dialog opens. Select the existing item and click Edit.
- 5. In the **Port** field, enter 8081.
- 6. Click OK.
- 7. In the **Type** field, select https.
- 8. In the Port field, enter 8080.
- You can leave Host name field empty.
 If your system later requires Host name, enter your computer name.

You can find your computer name in **Control Panel** > **System and Security** > **System**. This is your computer name, not an FQDN name.

10. In **SSL certificate**, select the right certificate. You can click **View** button to see the properties of your certificate.



Selecting the certificate



NOTE

If you do not see the appropriate certificate on your list, install your certificate first. There are numerous instructions on how to install the certificate available on the Web.

- 11. Click **OK**.
- 12. Select your old http binding configured on port 8081. Click Remove.
- 13. Click Close.

Modifying config file

After you change http://to https://in ISS, edit your Control Center config file:

- 1. Navigate to c:\Program Files\NiceLabel\NiceLabel Control Center\DocumentAPI\.
- 2. Open the config. json file with a text editor.
- 3. Find the "RenderingEndpoint" line and change http to https.

4. Save and close the config. json file.

Your communication between your desktop File Explorer and your Control Center is now secure.

5.2. Updating your database connection settings

When your security policies or database infrastructure change, update your Control Center connections to your database with our **Database Setup Tool**. Updating your database user credentials or your connection settings ensures your systems work correctly with your new configuration.

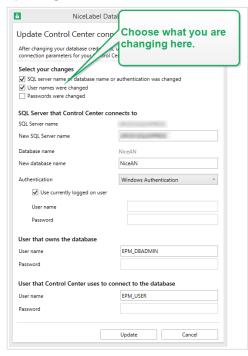


NOTE

For your **Database Setup Tool installation**, read Phase 2: Creating your database in a failover cluster.

To update your database connection settings:

- 1. Open Database Setup Tool.
- 2. Under **Select your changes** select or clear the following options depending on what are you updating:



Updating with Database Setup Tool

- SQL server name or database name or authentication was changed option renames your
 database and sets new user authentication methods. When selected, enter the SQL Server
 that Control Center connects to section to change:
 - Under SQL Server that Control Center connects to > New SQL Server name enter the name of the server instance that hosts your Control Center database.
 - Under New database name enter the name of your Control Center database. NiceAN is your default database name.

- Under Authentication type choose your login method for your SQL server. Select
 Windows Authentication or SQL Server Authentication depending on your SQL server configuration.
 - To log in to your database with your current Windows credentials, select Use currently logged on user.
 - To log in with different Windows credentials, clear Use currently logged on user checkbox and enter your user name and password.
 - To log in with **SQL Authentication**, enter your SQL user name and password.
- User names were changed: changes your user names of your database owner and users:
 - · EPM_DBADMIN is your default database owner.
 - · EPM_USER is your default database user.



Option **User that owns the database** is only available when you use a SQL Server or an Azure SQL Database Managed Instance when you set up your database.

- Passwords were changed: change the passwords of your database owner and users.
- 3. Click Update.

The Database Setup Tool displays a notification - **Success: Database configuration update was successful**. Your database is configured and your applications are ready to use.

5.3. Upgrading and migrating Control Center to another server

You can migrate your existing Control Center10 to a new server or you can migrate your Control Center 2019 and perform an upgrade to 10.



WARNING

Control Center10 database is not compatible with the previous versions of Control Center. You can't revert to the previous versions of Control Center once you upgrade the database. Create your Control Center database backup before you upgrade to Control Center10.

Migrating to a new server consists of two steps:

- Migrating of Control Center database.
- 2. Installing the Control Center application on your new server.

You can install the Control Center application and database on the same server or on separate servers.

When you migrate your database to a new server, some existing database settings prevent your new Control Center installation to work. The following procedure describes also how to change the necessary database properties to enable your new Control Center.

The goal is to copy your existing database to your new server and enable new users by running SQL scripts.

If you have currently installed Control Center V2019, activate your LMS10 license key in your existing Control Center V2019 works also with the V10 license.

To migrate your Control Center database and upgrade your Control Center:

- 1. On your current server create your Control Center SQL database backup. Copy the database backup to your new server and perform a database restore.
- 2. Install Control Center10 on your new server. During the installation select a database name that is different than the name of your backup database from your old server. (The default database name is NiceAN which is in most cases also the name of your old database. So during the installation select for example NiceAN1 name).



WARNING

Carefully check the option to enable HTTPS. You can't change the option after the installation without reinstalling Control Center.

The installation creates Windows users EPM_USER and EPM_DB_ADMIN.

The steps 3. - 7. describe how to set up EPM_USER and EPM_DB_ADMIN users.

3. Open your SQL Management Studio and run the script to create Windows or SQL credentials on the old database (the database restored from your old server).



WARNING

Edit the scripts before executing. Replace variable names \$(VARIABLE_NAME).

```
USE [master];
GO
```

4. Add permissions to EPM_DBADMIN user.

```
GRANT CONNECT SQL TO [$(EPM_DB_ADMIN)];

GRANT CREATE ANY DATABASE TO [$(EPM_DB_ADMIN)];
```

5. Create EPM_USER and grant permissions:

```
USE [$(DatabaseName)];
GO
CREATE USER [$(EPM_USER)] FOR LOGIN [$
(EPM_USER)] WITH DEFAULT_SCHEMA = [$(SchemaName)];
```

```
GRANT CONTROL, EXECUTE, SELECT, INSERT, UPDATE, DELETE ON SCHEMA::[$
(Schemaname)] TO [$(EPM_USER)];
GRANT CREATE TABLE TO [$(EPM_USER)];
GRANT CREATE SCHEMA TO [$(EPM_USER)];
```

6. Change the owner of SignalR schema:

7. Change the owner of the database. Here is the syntax for Windows users:

```
EXEC ('ALTER AUTHORIZATION ON DATABASE::[$(DatabaseName)] TO [$
(EPM_DB_ADMIN)];');
```



NOTE

\$(DatabaseName) is *NiceAN* (your old database)

\$(SchemaName) is nan

\$(EPM_DB_ADMIN) is NEW_SERVER\EPM_DBADMIN

\$(EPM_USER) is NEW_SERVER\EPM_USER

8. Rename your newly installed database, then rename your backup database to the name of your newly created database before renaming. This way your Control Center will use your backup database with new users.

Example

Your backup database name is NiceAN. When you installed your new database, you selected the name NiceAN1.

First, you rename your newly installed database from NiceAN1 to NiceAN1a.

Then you rename your backup database from NiceAn to NiceAn1.



NOTE

You can rename your databases if they are offline. Right-click your database and select **Tasks** > **Take Offline**.

Now you can run Control Center on your new server.

5.4. Migrating Control Center's database to a new server

You can migrate your Control Center's database to a new server and run your Control Center on the existing server.



NOTE

If you migrate your Control Center's database and also upgrade your Control Center, first migrate the database, then run the Control Center upgrade installation.

In case your Control Center is installed on *Server1*, your Control Center SQL database is located on *Server2* and you want to migrate your SQL database to *Server3*, do the following:

- 1. On *Server2* create your Control Center SQL database backup. Copy the database backup to *Server3* and perform a database restore.
- 2. Uninstall Control Center on Server1.
- 3. Perform a fresh Control Center installation on *Server1*. While installing, select the option to install Control Center database on *Server3*. Since there is already a backup of your database on *Server3*, choose a different name for your new database.
- Open your SQL Management Studio on Server3 and run the following scripts on your restored database. Scripts rename the users on your restored database so Control Center can recognize the users. (The old usernames are related to Server2.)
 - a. Create Windows or SQL credentials.



WARNING

Edit the scripts before executing. Replace variable names \$(VARIABLE_NAME).

```
USE [master];
GO
```

b. Add permissions to EPM_DBADMIN user.

```
GRANT CONNECT SQL TO [$(EPM_DB_ADMIN)];

GRANT CREATE ANY DATABASE TO [$(EPM_DB_ADMIN)];
```

c. Create EPM_USER and grant permissions:

```
USE [$(DatabaseName)];
GO

CREATE USER [$(EPM_USER)] FOR LOGIN [$
(EPM_USER)] WITH DEFAULT_SCHEMA = [$(SchemaName)];
GRANT CONTROL, EXECUTE, SELECT, INSERT, UPDATE, DELETE ON SCHEMA::[$
(SchemaName)] TO [$(EPM_USER)];
GRANT CREATE TABLE TO [$(EPM_USER)];
GRANT CREATE SCHEMA TO [$(EPM_USER)];
```

d. Change the owner of SignalR schema:

e. Change the owner of the database. Here is the syntax for Windows users:

```
EXEC ('ALTER AUTHORIZATION ON DATABASE::[$(DatabaseName)] TO [$
(EPM_DB_ADMIN)];');
```



NOTE

\$(DatabaseName) is NiceAN (your old database)

\$(SchemaName) is nan

\$(EPM_DB_ADMIN) is NEW_SERVER\EPM_DBADMIN

\$(EPM_USER) is NEW_SERVER\EPM_USER

- 5. Rename your **new** Control Center NiceAN database on Server3.
- 6. Rename your **restored** database to the original name of your **new** Control Center NiceAN database on *Server3*.

You can delete your **new** Control Center NiceAN database on *Server3* after you verify that your Control Center works fine.

5.5. Printer Management data migration from older versions of Control Center

When you upgrade your Control Center from an older version (for example from V2019 to V10), Print Management data doesn't migrate automatically. To migrate Printer Management data do the following:

- 1. Upgrade your Control Center to the latest version.
- 2. Upgrade all NiceLabel modules to the latest version and connect them to your Control Center.
- 3. In Control Center go to Printer Management > Printers.
- 4. Click Add > Import printers.
- 5. Select printers and follow the wizard. The wizard automatically selects printer groups based on your existing Printer Management data. If printers are not available, wait for workstations to report printer data to Control Center.

There are some limitations and differences in the new Printer Management compared to the previous versions.

- In previous versions, Groups included print queues while in the new version Groups includes printers (devices).
- In previous versions, print queues could belong to multiple groups. In the new version, printers belong to just one group.
- In previous versions, Printer Management supported dynamic groups (by printer name or status). New Printer Management group membership is static.
- The group for the imported printers is first determined based on static groups. If new Printer Management doesn't find any group, dynamic groups are created (but only by printer name, not by status).

6. Installing Web Printing

Web Printing is a web application that is a part of Control Center. Through Web Printing, you to central deploy your printing Applications (labels and Solutions) from your Control Center's storage across your departments, factories, and locations with your remote co-workers or external users.



NOTE

Web Printing and Control Center must be installed on the same computer.

To share and use your printing Applications, you must complete your Web Printing installation procedures on both sides:

- On your server.
 Install your Web Printing site to enable the communication between your Control Center and Control Center's users (print operators).
- On your user computer.
 Install NiceLabel Web Client so you can access and use your shared printing Applications. Because NiceLabel Web Client is a thin client that does not require administrative privileges for installation, all your users can install Web Client on their computers.



IMPORTANT

For advanced Web Printing installation scenarios read the Web Printing Installation Guide.

6.1. Installation steps for the Web Printing site

The Web Printing site connects to your Control Center database using the SQL user authentication. Before you begin with the installation, make sure that you know the user name and password for the SQL user with sufficient privileges for your Control Center database. You need this information during your installation process.

- 1. Log in to your computer as a user with local administrative permissions. This can be a local **Administrator** user account.
- 2. To ensure a complete installation, close all open applications before you start.
- 3. Download the software package or insert NiceLabel DVD. **Web Printing** application installation checks the installation package content.



NOTE

If the application menu does not start automatically, double-click **NiceLabelWebPrinting10.exe**.

Before the actual installation starts, the wizard verifies if the following prerequisite components are installed on the server.

- · Microsoft IIS
- Microsoft .NET Framework 4.5

If the .NET component is not present on your system, the installer sets up the component automatically before the wizard continues.

- 4. Select Install NiceLabel LMS.
- 5. Select NiceLabel Web Printing.
- 6. Select installation language from the drop-down list and click **OK**.
- 7. Follow the setup wizard prompts.
- 8. Define the IIS settings for your **Web Printing** site and define how your users access your Web Printing page:
 - You can install your Web Printing as a virtual directory below the default website. Configure the virtual folder name.
 - For example, the users access the site at http://<yourservername>/PowerFormsWeb.
 - You can install your Web Printing as a new website. Be careful when providing the port number. You can only use ports that are not in use by any other service on this computer.
 For example, the site can be accessed as http://<yourservername>:81/
 PowerFormsWeb if you have defined the port 81.



NOTE

You can install the Web Printing site as a new site (1st level), or as a virtual directory within the selected Web site (2nd level). You cannot install it on the 3rd level.

You can also define the host header values, so your site responds with a user-friendly name.
 For example, if you define a friendly name "mypowerformswebserver" and define the host header value for Web Printing site, the site also responds at the address http://mypowerformswebserver.



TIP

Lean more about setting up user-friendly names in this KB article: Using host header names to access Web Applications site.

Activate HTTPS support if you wish to establish a secure client—server connection. This
option automatically sets your port number to 443.



Manually add HTTPS site binding and X.509 (SSL) certificate to the selected site in IIS manager. Details are available in the section Adding HTTPS site binding and SSL certificate in IIS.

Click Next.

Select the Microsoft SQL server, where you already installed your Control Center database.



NOTE

This and the next steps are only applicable if you install the Web Printing on a different computer than yourControl Center.

Make sure you enter the correct SQL and instance name. If the SQL Server is configured with a default instance, enter only your server name. If the MS SQL Server is configured with instances, enter your server and instance name in the server\instance syntax, for example, SERVERNAME\SQLEXPRESS.



WARNING

Your Control Center database (NiceAN or any other) MUST already exist on the selected Microsoft SQL server.

- 10. Enter your user name and password to access your Control Center database on Microsoft SQL server. Provide the SQL account credentials (not Windows account credentials!). The Web Printing site connects to your database server as a SQL user.
- 11. After completing your Web Printing site setup, you can leave the **Run Web Printing** site check box selected.

Click Finish.

The **Login** page for Web Printing site opens in your browser.

6.2. Web Client installation

Installing Web Client for the logged-on user (Default Option)

By default, Web Client installs on the computer for the currently logged-on user. This is the most common installation method that does not require administrator privileges.

- 1. Run Web Client installation file on a client computer.
- 2. Select installation language. Click **OK**.
- 3. Start Installation window appears. Click Install.

4. Click Close after the setup is done.



NOTE

After completing the installation, you can find the installed Web Client in **Users\AppData** folder.

- 5. Open a web browser on your client computer and enter the address: http://yourControlCenter/powerformsweb.
- 6. Log in to your Web Printing application. The web page enables you to launch your printing solution.



NOTE

You must launch your printing solution from your web browser only for the first time. The next time you can run your printing solution by double-clicking your **Web Client** icon.

Installing Web Client for all users

You can also install the Web Client for all users that log on to the computer. This installation method requires administrator privileges.



NOTE

This installation method is useful when using Citrix servers. Installation for all users allows you to install the Web Client only once, and publish it to all users.

- 1. Open Command Prompt.
- Navigate to the downloaded Web Client installation file NiceLabelWebClientSetup.exe on your system.
- 3. Run command NiceLabelWebClientSetup.exe ALLUSERSINSTALL.

After the installation for all users, you can find the installed Web Client in ProgramData folder.

7. Activation



NOTE

NiceLabel Cloud edition runs in SAAS mode and doesn't need activation. To enable users access to NiceLabel Cloud and running NiceLabel applications, see the Managing Users topic.

To learn how to activate your Control Center, read the Activating New Product topic.

After you activate your Control Center, you can activate your NiceLabel desktop applications by choosing the **Control Center** option and entering your Control Center web address.



NOTE

You can enter your Control Center license in your NiceLabel desktop applications, but this will activate only your applications, not your Control Center.

7.1. Managing and deactivating licenses

In Control Center, you can:

- · Activate your licenses.
- · Increase the number of available printers by upgrading your license or enable additional features..



NOTE

Your license enables you Control Center features, and the number of printers you can use.

You can see your license details (edition and number of printers (used printers in the **Administration** tab > **Product info**.

Check for more details about counting and reserving printers in a dedicated topic.

- · Upgrade your Control Center version.
- · Deactivate your licenses.

7.1.1. Activating Control Center

To activate the licenses in your Control Center:

1. In your web browser enter your Control Center's URL.

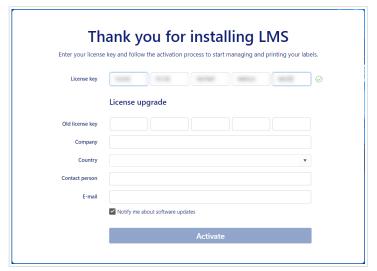
http://server/epm

Where server is the name of your computer with Control Center installed.

2. Go to the **Administration** tab. The activation window opens.



3. After you enter your license key **Activate**, a window opens where you enter your contact data.



4. Click the **Activate** button. License Details window opens where you can check your Control Center edition, number of printers, and contact data. You can now upgrade your license, increase the number of printers, or start using Control Center.



NOTE

If your computer doesn't have an internet connection, go to Section 7.1.5, "Activating without internet access (offline activation)" and follow instructions.



NOTE

You can change your contact data if you click the Change license details button.

Your Control Center is now activated and ready to use. You can now activate your NiceLabel desktop applications by choosing the **Control Center** option and entering your Control Center web address.

7.1.2. Changing licenses and adding printers

By upgrading your license you can add features from Enterprise edition if you currently have Pro edition, or increase the number of printers.

- Change license. You can expand the amount of product features by activating your Enterprise license.
- Add printers. You can upgrade the number of printers you use to print your labels from NiceLabel applications.

Each upgrade type requires an upgrade key. After you purchase the upgrade at your NiceLabel reseller or on the NiceLabel website, you receive the upgrade key.

To upgrade your existing Control Center license:

1. In your web browser enter your Control Center's URL.

http://server/epm

Where server is the name of your computer with Control Center installed.

- 2. Go to the Administration tab > Product info.
- 3. Click Change license / Add printers.
- Enter your license key and click Activate the license.

If the computer has an Internet connection, your license key is now upgraded.



NOTE

If your computer doesn't have an internet connection, go to Section 7.1.5, "Activating without internet access (offline activation)" and follow instructions.

7.1.3. Version upgrade

When you install a major upgrade version of your Control Center (for example, from V2019 to V10), you need an upgrade license key. There is no need for a new activation with minor upgrades (for example, from V10.0 to V10.1).



TIP

Plan your Control Center's version upgrade in advance. The upgrade may cause production downtime. Complete the upgrade procedure while the printing of your labels can be paused.

To install and activate a major upgrade of Control Center:

- 1. Download and install the latest version of Control Center. After completing the installation procedure, the new version of Control Center opens in your browser.
- Go to the Administration tab > Product info > Change license / Add printers. Copy and paste
 the Upgrade Key from the email you received from your NiceLabel reseller after purchasing the
 license.
- 3. Click **Activate the license**. Activation code generates automatically and upgrades your license.



If your computer doesn't have an internet connection, go to Section 7.1.5, "Activating without internet access (offline activation)" and follow instructions.

After installing the new version of Control Center, your previous version program files remain on your computer. These files do not interfere with the new installation. You can leave these files on your computer or delete them.



NOTE

The Web.config configuration file of the new installation replaces the Web.config file from the previous installation. Installation renames previous Web.config to Web.backup.

7.1.4. Version upgrade after a clean install

Use this type of upgrade procedure when you perform a fresh install of the latest Control Center version and you have a license key of the previous version and the upgrade key.

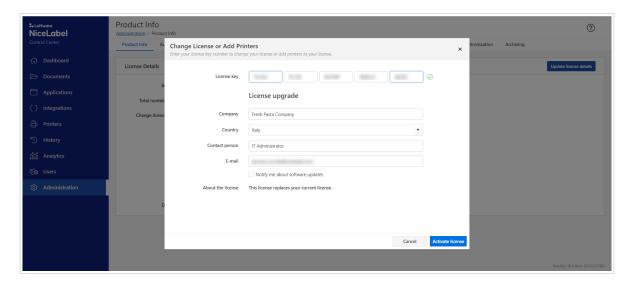


TIP

Plan your Control Center's version upgrade in advance. The upgrade may cause production downtime. Complete the upgrade procedure while the printing of your labels can be paused.

To upgrade your previous version license key on a clean install of the latest version:

- 1. Download and install the latest version of Control Center. After completing the installation procedure, the latest version of Control Center opens in your browser.
- 2. Go to the **Administration** tab > **Product info** > **Change license / Add printers**. Copy and paste the **Upgrade Key** from the email you received from your NiceLabel reseller after purchasing the license.
- 3. Click **Activate the license**. Control Center recognizes the upgrade license key and renames the fields into **Upgrade key**.



- 4. Paste your license key from the old version into the **License key** field.
- 5. Click Activate the license. Activation code generates automatically and upgrades your license.



If your computer doesn't have an internet connection, go to Section 7.1.5, "Activating without internet access (offline activation)" and follow instructions.

7.1.5. Activating without internet access (offline activation)

If the computer where you activate your Control Center doesn't have internet access:

1. In your web browser enter your Control Center's URL.

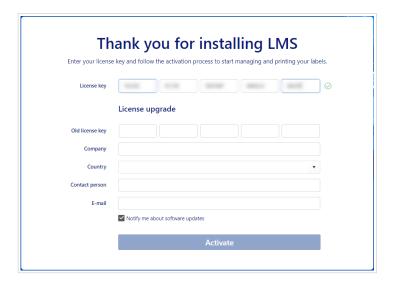
http://server/epm

Where server is the name of your computer with Control Center installed.

2. Go to the Administration tab. The activation window opens.



3. After you enter your license key **Activate**, a window opens where you enter your contact data.



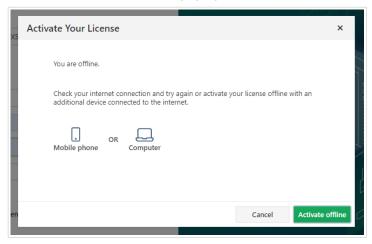
4. Click the **Activate** button. License Details window opens where you can check your Control Center edition, number of printers, and contact data. You can now upgrade your license, increase the number of printers, or start using Control Center.



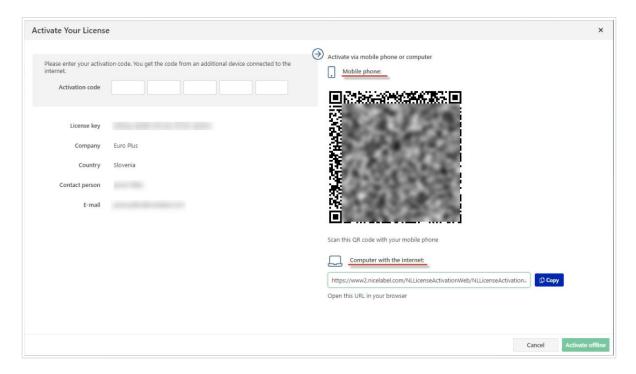
NOTE

You can change your contact data if you click the Change license details button.

5. Activate Your license screen pop up. Click Activate offline button.



6. A new screen with an activation link opens.



- a. You can scan a QR code with your smartphone. QR code contains a link to NiceLabel activation server where the activation code is generated.
- b. You can copy the link and enter it into the browser on a computer with internet access.
- 7. After the **Activation Web Page** opens, fields with information about your license are automatically populated. You can edit personal information.



Click Activate to generate the Activation Code. The page with your activation code opens. Copy
the Activation Code. You will enter the Activation Code on your computer with Control Center
installed.





Do not close the license activation dialog on your offline computer while generating the **Activation Code** on your computer with internet access.

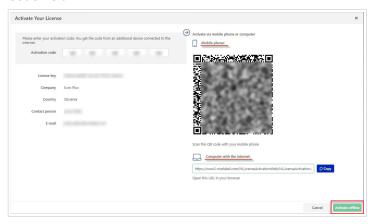
If you accidentally close the license activation dialog, repeat the activation procedure. A new **Registration Code** will be generated.



NOTE

If you do not have any available computers with internet connection, call NiceLabel support and provide the **Registration Code**.

9. Go to your computer with Control Center installed. Paste the activation code into the **Activation Code** field.



10. Click Activate offline.

Your Control Center is now activated.

7.1.6. Deactivating licenses

Deactivating a license key allows you to move the license from one server to another.

To deactivate the license:

- 1. Make sure that the computer with Control Center has a connection to the internet.
- 2. Log in as a user with the administrative permissions to Control Center.
- 3. Go to the **Administration** tab > **Product info** and click the **Deactivate your license** button.
- 4. License deactivation pop-up opens. Confirm license deactivation.

Your Control Center is now deactivated. Now you can activate Control Center on a new computer or reactivate on the same computer.



WARNING

When you deactivate your Control Center license, all NiceLabel modules (Designer, Automation, and Web Client) connected to your Control Center are deactivated.

7.2. Activating NiceLabel modules

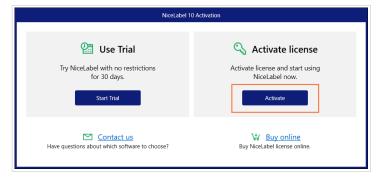
Activate your NiceLabel modules (Designer, Print, or Automation) on all workstations.



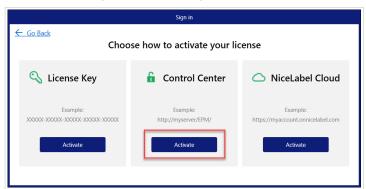
NOTE

If you don't activate your modules, they will run in a 30-day trial mode with no connection to the Control Center. Print event logging and user management are not available while in trial mode.

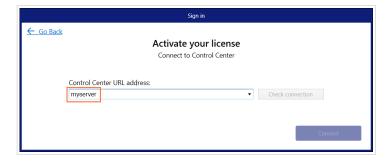
- 1. Make sure that your Control Center is activated.
- Run NiceLabel module on your computer. The Activation dialog box opens.



- Click Activate.
- 4. The activation options window opens. Click **Activate** under **Control Center**.



Enter the name of your server, where Control Center is installed. To verify if your client computer
can connect to your Control Center server, click Check connection. To finish your activation, click
Connect.



Your module is now connected to your Control Center. Repeat the activation procedure also on other modules.

7.3. Printer licensing

Control Center tracks the number of printers in use in the **Print Management** list. Your Control Center license might limit the number of printers. You can check how many printers allows your license and also how many printers are in use if you go to **Administration** > **Product Info**.



NOTE

See the detailed description of counting, using, and reserving printers in our licensing document.

If a printer is not in use for seven days, Control Center automatically removes this printer from the list.

To detect and count your printers, NiceLabel uses a combination of:

- **Printer model name**. The model name is hard-coded in the printer driver. Users cannot change this name.
- **Printer location**. How the printer is connected to your computer is irrelevant for license counting. NiceLabel either identifies the printer by:
 - · The IP address for network printers
 - · Location + port if the printer is connected locally

To ensure printer availability:

- 1. Go to Print Management > Licensed Printers.
- 2. Select your printer and click the **Reserve printer** button.

You prevent the selected printers from being removed after idling for more than 7 days with this option. You can **Unreserve printer** at any time.



When you exceed the number of used printers defined by your license, the software enters a 30-day grace mode. While in grace mode, the number of available printers is temporarily doubled, but you get a warning message.

To permanently increase the number of available printers, you can purchase an upgrade license key. Contact NiceLabel sales.

8. Uninstalling Control Center, Web Printing, and Web Client

You can uninstall Control Center, Web Printing, and Web Client the same way as most other Windows applications.

The order of uninstalling Control Center, Web Printing, and Web Client is not important.



NOTE

If you want to upgrade Control Center, Web Printing, or Web Client, you don't need to uninstall the programs. Just run the latest installation files.

Uninstalling Control Center

- 1. Open your Control Center page and go to the **Administration** tab.
- 2. Click Deactivate your license.
- 3. On your computer go to your **System Settings > Apps & Features** (Add or remove programs).
- 4. Find and click NiceLabel Control Center.
- 5. Click Uninstall.
- 6. Follow the wizard to uninstall your program.
- During the uninstallation process, you will be prompted to keep or remove Control Center database. If you will reinstall Control Center in the future, we would suggest you keep the database.

Uninstalling NiceLabel Web Printing

- 1. On your computer go to your **System Settings** > **Apps & Features** (Add or remove programs).
- 2. Find and click NiceLabel Web Printing.
- 3. Click Uninstall.
- 4. Follow the wizard to uninstall your program.

Uninstalling NiceLabel Web Client

1. On your computer go to your **System Settings > Apps & Features** (Add or remove programs).

- 2. Find and click NiceLabel Web Client.
- 3. Click **Uninstall**.
- 4. Follow the wizard to uninstall your program.