# NiceLabel Control Center 2019 User Guide

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**Cloud Edition** 

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# 1. Introduction

Label Cloud is a cloud-based version of the NiceLabel Label Management System. It is an online application used to ensure label and brand consistency and to remotely monitor the label printing process in the production environment.

The main management features in the Control Center include:

- Flexible licensing. All NiceLabel clients (design and production users) get licenses from the Control Center.
- Central event logging. All clients will log their printing activities into Control Center.
- Printer monitoring. Statuses of label printers are continuously reported to the Control Center.
- Managing print jobs. You can monitor statuses of print jobs from connected clients. You can remotely pause jobs, restart jobs, change their priority and move jobs to secondary printers in case of issues.
- **Proactive alerting.** Send out alerts in case of software or printer problems in the production environment.
- **Web management.** Concurrent access to management console using standard Web browsers, Control Center is a web application.
- Revision control system (versioning). Track changes in your files and manage past file versions
- Workflows. Align the printing process with your established approval procedures. Enable life-cycle on the document level.

# 1.1. About this Manual

NiceLabel Control Center user guide helps you set up and use this module to manage your NiceLabel-managed printing solution.

The User Guide contains the following sections:

**Introduction.** Introduces you to the Control Center.

Installation and Activation. Learn how to install and activate the NiceLabel Control Center.

**Configuration and Administration.** Learn how to set up NiceLabel Control Center and configure its operation.

**Using NiceLabel Control Center:** Discusses the user interface and shows you how to use NiceLabel Control Center from the user perspective.

**Technical Support:** Access to technical resources and contacting technical support.

# 2. Configuration and Administration

# 2.1. Configuration

# 2.1.1. Changing Language of the User Interface

Control Center is a Web application and runs in a browser. To change the language in which the user interface is presented, change language preference of your browser. You can have multiple languages defined in your Windows preferences. The language at the top of the list is the primary language. Control Center will be displayed in this language, if the translation is available. If it is not, the next language is used.



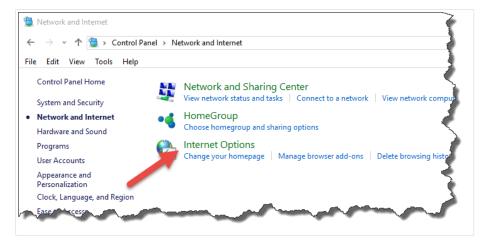
#### NOTE

If the Control Center is not available in the selected language, it will display in English.

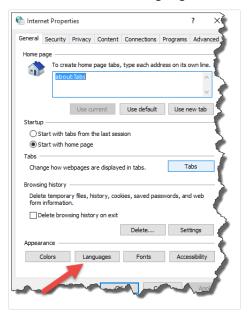
# 2.1.1.1. Microsoft Internet Explorer and Microsoft Edge

To change the Control Center language in Microsoft Internet Explorer and Microsoft Edge, do the following:

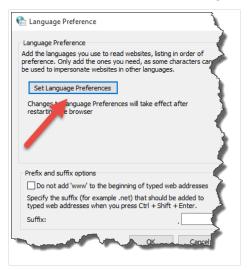
- Open Control Center.
- Select Network and Internet > Internet Options.



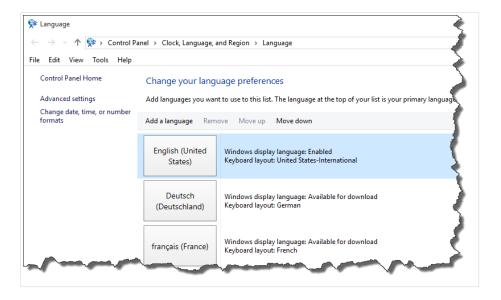
3. In General tab, click Languages button.



4. If you use Windows 10 or newer, click **Set Language Preferences** button. If you use other Windows operating system, skip this step.



5. Change the order of language appearance. Place the main language at the top of the list. If the required language is not in the list already, click **Add a language** button, select the language and add it to the list.

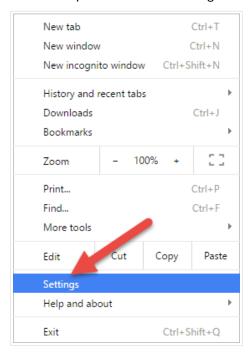


6. Close all dialog boxes.

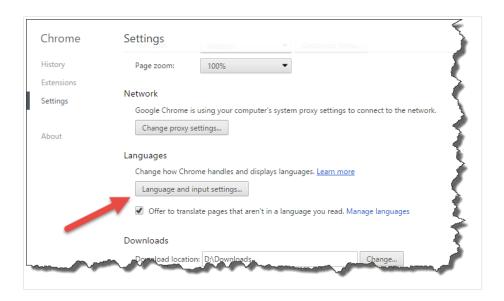
# 2.1.1.2. Google Chrome

To change the Control Center language in Google Chrome, do the following:

1. Click the Options button to the right of the address bar and choose Settings.



- 2. Click **Show advanced settings...** at the bottom of the window.
- 3. Scroll down and click Language and input settings... button.



4. Change the order of language appearance. Place the main language at the top of the list. If the required language is not in the list already, click **Add** button, select the language and add it to the list.

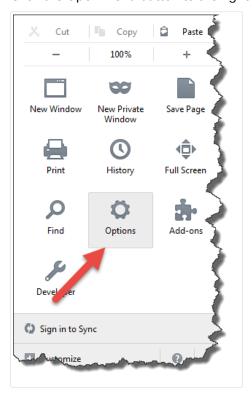


5. Click Done.

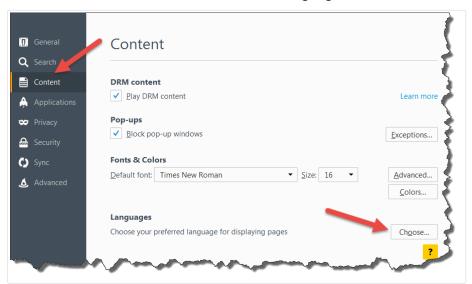
## 2.1.1.3. Mozilla Firefox

To change the Control Center language in Mozilla Firefox, do the following:

1. Click the Open menu button to the right of the address bar and choose **Options**.

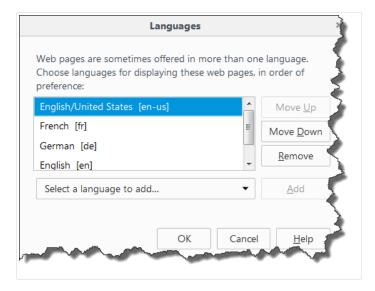


2. In **Content** menu, click **Choose** button in the **Languages** section.



3. Change the order of language appearance. Place the main language at the top of the list.

If the required language is not in the list already, click **Select a language to add...** drop-down, select the language and click **Add** button to add it to the list.



4. Click OK.

# 2.1.2. Multitier Landscape Management

Increasingly more labeling operations have come to rely on a multitier configuration model as the most efficient way to stage and deploy the labeling-related files. A multitier approach removes all of the risks identified in case of a single system landscape, where a single server is used for development, testing, and production.

In such landscape model, the new labeling solutions are created and test-driven in Development and Quality Assurance / Testing environments before they are adopted in the Production environment. Usually a three tier landscape is adopted, or at least two tier landscape, where the roles of Development and Quality Assurance are merged on the same environment. Each environment requires a dedicated installation of the Control Center product.

# 2.1.2.1. File Synchronization Between Landscapes

The synchronization mechanism in Control Center ensures the promotion of approved files from one landscape to the next. For more information about the synchronization functionality, see the section Synchronization.

# 2.1.2.2. Identifying Document Storage in Multitier Landscape

When working in a multitiered landscape, you can configure custom names for each landscape. This makes it easier to identify to which landscape the current Document Storage belongs to.



To configure a custom landscape name, do the following:

- 1. Open the application SQL Server Management Studio.
- 2. Connect to the SQL Server hosting the database of a Control Center for which you want to define a custom name.
- Expand the tree-view to reach Databases > <selected database (NiceAN by default)> >
  Tables > nan.Setting.
- 4. Right-click the table nan.Setting and select Edit top 200 Rows.
- 5. Add a new record.
- 6. For the field **Setting** enter the value "InstanceName".
- 7. For the field **Value** enter the custom name for the current landscape.

#### **Example**

The entered custom name in the screenshot above is "Quality Assurance Landscape".

# 2.2. Administration

## 2.2.1. Users

# 2.2.1.1. Adding organizational directory users

If your company uses an organizational directory such as Microsoft Azure Active Directory (AAD), you can add all included users and groups to the Label Cloud.

The functionality from this section is available in Label Cloud Business and Label Cloud Unlimited.

# Connecting to your directory

To connect your Label Cloud to the Microsoft Azure Active Directory (AAD):

1. Sign in to the Label Cloud using your Microsoft account. This account must also have AAD administrative privileges.



#### NOTE

If your Microsoft account does not have administrative privileges on AAD, you can invite an administrator and let them connect the AAD to Label Cloud.

- 2. Go to Administration > Users > Organizational Directory and click connect.
  - AAD connection dialog page opens. Follow the on-screen instructions.
- 3. Send your colleagues the link to the cloud Control Center.
  - By default, the cloud address is https://account.onnicelabel.com/dashboard where account is the name of your Label Cloud account.
  - After the invited users click the link, they sign in to the Label Cloud using their organizational Microsoft account.



Organizational account is a user account that is defined in your company's organizational directory.

### Automatic regrouping of guest user accounts

In certain cases, you might have guest users that you initially invite to the Label Cloud individually, and later add them to the cloud as part of your organizational directory. Your cloud Control Center automatically regroups these guest accounts under the organizational users.

- Cloud Control Center removes the guest user account. This is the account that becomes active
  after the individually invited user clicks the invitation email link, and completes the sign up
  procedure.
- The user's organizational account becomes active in Label Cloud and accessible using the organizational credentials.
- · Cloud Control Center starts displaying the user's organizational display name.
- The user whose account regroups from guest to organizational, retains membership in roles, and remains an authorized user for the applications they are currently using.

#### **Example**

John is responsible for labeling in his company. He receives an invitation to the Label Cloud from a NiceLabel sales representative. During the testing phase, John individually invites a group of his colleagues to sign up to the Label Cloud. After the testing phase completes, John asks Mike, the IT specialist, to connect their company's organizational directory to the Label Cloud. John must first invite Mike as a guest user. Mike must first sign up and connect the organizational directory to the Label Cloud. When Mike is done, all existing "testing phase" guest users that are also members of the connected organizational directory regroup and become organizational accounts.

## 2.2.1.2. Inviting users individually (Guest Users)

You can individually invite your colleagues or external users to participate in your Label Cloud system. This allows you to share your labels, solutions and configurations within your company and with users from your partner companies.

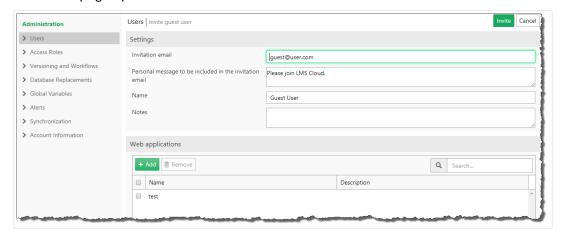
The individually invited users join your Label Cloud using their personal Microsoft or Google accounts.

To individually invite users to your Label Cloud:

1. Open your cloud Control Center and navigate to Administration > Users.



- 2. To invite a user, click +Invite guest user.
  - The **Users** page opens.



- 3. Under **Settings**, type in the **Invitation email** address. Other fields are optional. NiceLabel recommends you to create a descriptive **Personal message**. **Name** helps you distinguish the users later as their number grows. Use Notes to describe the user you are currently adding.
- 4. Under **Web Applications**, you can immediately start sharing your label or solution documents from the cloud Control Center with the invited users.



5. Under **Access roles**, you can assign the invited guest user the appropriate access role. Access roles allow you to control the user privileges in your Label Cloud.

- Click +Add. The Add roles window opens. Select the role(s) for your invited user.
- b. Click Add.



To see the granted privileges for each access role, go to **Administration** > **Access Roles** > click a role > **Application Permissions**, and expand the list. Access role details are available in the Control Center User Guide.

- 6. Click **Invite** to send the Label Cloud invitation email to the guest user. The invited user receives the invitation email. Before they can start working with Label Cloud, they must:
  - Sign in to Label Cloud.
  - · Download and install the client.
  - · Connect the client to the Label Cloud.

# 2.2.2. Managing User Privileges

Using access roles helps you keep your entire labeling system secure. You can choose exactly what access role members can do and see in Control Center and other NiceLabel programs.

Use the **Access Roles** page in Control Center to set user privileges for your labeling system according to your own specific security policies. Access roles allow you to assign different sets of privileges to Control Center users.

Control Center includes default access roles with well-balanced permission sets:

 Administration: All permissions granted. Members in this role have full Control Center privileges. Administrators can edit default roles, customize roles, and assign roles to users or groups.



#### WARNING

To prevent being locked out of Control Center, be sure you have assigned at least one Administration role member before you enable or change any authentication types. This ensures you can log in as an administrator. The local administrator of the Windows system that hosts Control Center is an Administration access role member by default.

- **Approver:** Allows role members to review, approve, or reject labels or solutions in Document Storage. Approvers send documents to production.
- Approver (second level): Allows role members to review, approve, or reject documents on the second document approval step. Approvers send documents to production.
- **Author:** Allows role members to create or edit label templates and solutions. Members in this role can edit labels and forms, and have control over label production.

- **Operator:** Allows role members to print labels and run solutions without editing. Members in this role have read-only access to Document Storage and cannot change any label templates or application configurations.
- **Service Provider**: Allows your service provider to access your account for support, setup, and administration. This role has no members by default.
- Roles off: When you disable user logons, use this role to set permissions for everyone in Control Center.



These default access roles have preset ranges of privileges. You can modify them to match your company's specific requirements.

To learn how to see and edit default access roles or add new access roles, read Setting up Access Roles.

#### **Example**

John needs full access to Document Storage to upload printing solutions and make them available for production. Set John's access role to Author.

Annie needs access to the Reports page to prepare reports on printing consumables. You can assign Annie to any default access role.

Charlie is a printer operator. He only runs solution files in runtime mode and prints labels. Set Charlie's access role to Operator.

Martha is an account administrator. She needs access to all administrative features. Martha belongs in the Administration access role.

# 2.2.2.1. Multiple role membership

If your users or groups are members of multiple access roles, their overall security access sums up privileges of all access roles.

When your users are members of two access roles, Control Center grants them privileges from their highest access role, and overrides privileges denied in other roles.

#### **Example**

**Charlie** is a member of **Operator** and **Author** access roles. His Operator role grants him read-only access to Document Storage, but his Author role grants him full access to Document Storage. In this case, Charlie has full access to Document Storage.

# 2.2.3. Setting up Access Roles

You can set up access roles for users in Control Center in two ways. You can edit default access roles, or create your own custom access roles from scratch.

- Customize default access roles to comply with specific policies or procedures.
- You can keep default roles, use additional customized roles for special use cases, or add new access roles.



#### NOTE

You cannot delete default access roles.

- 1. To open Access Roles, go to Administration > Access roles.
- 2. You have two options:
  - · To edit a default access role, click the role you want to edit.
  - To set up a new access role, click +Add.
- 3. Control Center opens the access role configuration page for editing.
  - a. In **Settings**, type the role name and description. Make these easy to differentiate from other roles. For default access roles, you can edit the role description already there.
  - b. Set the role **Status**. Toggle **Active** to make the role available immediately. Toggle **Suspended** to make the role unavailable.



#### **NOTE**

Default access roles are always active. You can only change the **Status** of new roles you create manually.

- Set the role **Permissions**. Define which actions members of this access role can perform. To learn more about setting permissions, read Setting role permissions.
- d. Click **Add+** to add users or groups to the access role. A new pop-up window opens.
  - Organizational users lists all users that belong to your company's Azure Active Directory.
  - Organizational groups lists all groups that are defined in your company's Azure
    Active Directory.
  - **Guest users** lists all users that are invited or have already signed up to the cloud Control Center using an invitation link.
- e. Click **Save**. Your access role is configured and ready to use.



When you delete access roles, role members lose their permissions.

# 2.2.4. Setting Role Permissions

Setting permissions for your access roles helps you keep your entire labeling system secure. You can choose exactly what access role members can do and see in Control Center and other NiceLabel programs.



#### **NOTE**

NiceLabel recommends using default access roles due to their well-balanced permission sets. If you configure permissions, **consider your security policies** and set permissions for each access role carefully.

For security, your users in different access roles need different levels of access to files, folders, and actions when they use NiceLabel Control Center. NiceLabel groups common permissions levels into default access roles. Administrators can customize or create new access roles. Use the **Permissions for this role** section in **Access Roles** to control which actions or settings are available to members of each access role.

To set access role permissions, follow these steps:

- 1. Log in to Control Center as an administrator.
- Go to Administration > Access Roles.
- Add a new access role or click an existing access role from the list.
   The Access roles configuration page opens.
- 4. Set your permissions.

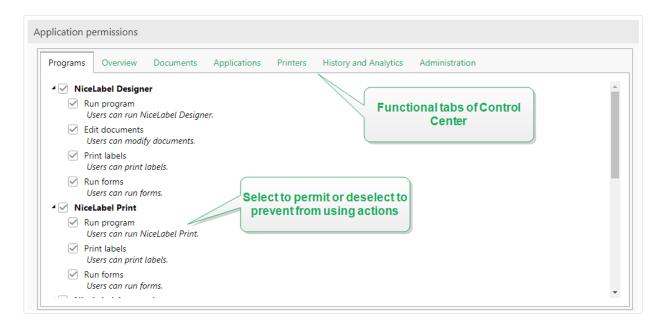
The **Permissions for this role** section includes multiple tabs with lists and detailed descriptions of permissions for this role.

- To **grant** specific permissions for this role, check the boxes.
- To **disable** specific permissions for this role, un-check the boxes.



#### NOTE

Disabling permissions also makes them invisible to access role members.



- Use the **General** tab to set **global role permissions** for your NiceLabel applications and decide what users in this role can do in your labeling system. For example:
  - Run NiceLabel programs:
    - Designer
    - Print
    - Automation
  - · Edit documents
  - Print labels
  - · Run forms
  - · Edit global variables
  - · Edit options
  - Upgrade and deactivate licenses
- Use the remaining tabs to set **Control Center role permissions**. These are permissions users in this role have when they log in to Control Center. The following permissions tabs correspond to the navigation tabs in Control Center:
  - Overview: Set access to the overview page in Control Center.
  - **Documents**: Set general, default, and custom permissions for document storage: archiving/restoring, purging, setting workflows, etc.



To learn more about file access control options, read File Access Control.

- · Applications: Set permissions for web applications and cloud integration management.
- **Printers**: Set permissions for print queue viewing and management, printer group configuration, reservations, and cloud printers.
- **History and Analytics**: Set permissions for viewing errors, alerts, print job logs, label reprinting, viewing data, and system audit logs.
- Administration: Set multiple administrative permissions for Control Center access role users.

Click **Save** to apply your permissions.

Your custom permissions are saved and applied in Control Center and other NiceLabel programs.

# 2.2.5. Versioning and Workflows

Control Center is a document management system for your labels and solutions. Click the **Documents** tab to find all the labels, solution files, and associated files you need for labeling in your organization.

Because users constantly create and change labels and solution files, Control Center includes two default access-control mechanisms:

• Versioning ensures your end-users only see only approved versions of labels and solution files.



#### **NOTE**

Control Center considers users with read-only rights end-users.

Workflows ensure authorized users can participate in the document approval process. Control
Center allows you to define individual users as approvers for various steps in the document
approval process.

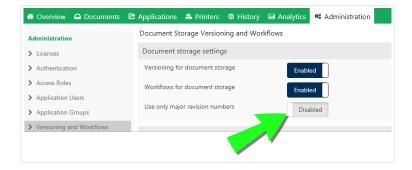
To enable Versioning and Workflows for your Document Storage in Control Center, go to **Administration > Versioning and Workflows** and toggle buttons to **Enabled**.



#### **NOTE**

You can enable Versioning and Workflows separately. To use workflows, enable versioning first.

Control Center allows you to choose your preferred way of revisioning. You can either use:



- Combination of minor and major revision numbers after you edit and check in your documents.
   This is the default option. In this case, minor revision numbers mark smaller user edits while working on a draft or when applying interim corrections. After the document finishes the approval process (becomes approved), it gets the major revision number. Leave the Use only major revision numbers toggle button on Disabled.
- If you decide to enable Use only major revision numbers, each checked-in document change gets a higher major revision number.
   If you upgrade your Control Center to version 2019.2 and later, the Use only major revision numbers option is enabled by default. Previous versions of Control Center only allowed you to use major revision numbers. The enabled option ensures the continuity of versioning.

To learn more about versioning, read Revision Control System.

To learn more about applying default or custom workflows, read Workflows.



#### **NOTE**

Versioning and Workflows are enabled by default.

# 2.2.5.1. Using versioning

When you enable versioning for document storage, all of your files are included in the revision control system. Control Center allows you to:

- Work continuously with revisions (versions) of your files. You no longer need to maintain multiple file versions. With versioning, you have a single file which includes your entire revision history.
- Track changes. Revision history tells you exactly who makes changes to files and when. Using versioning with workflows makes all your document approval steps available.
- You can revert to previous revisions.
- You can visually compare your revisions.
- · You can restore deleted files.

To learn more about versioning, read Revision Control System.

## 2.2.5.2. Applying workflows

Workflows are sequences of steps that make the correct file versions in your Document Storage available for your target users. Target users can be print operators, external partners, or any users who print labels or run solutions.

Control Center comes with 3 default workflows:

- · Label Production Approval Process.
- Two-step Label Production Approval Process.
- · Label Production Approval Process with Delayed Publishing.



The number of available steps, transition steps, and user roles are predefined by NiceLabel. Administrators can customize default workflows.

You can apply workflows to folders in Document Storage.

To learn more about applying default or custom workflows, read Workflows.

# 2.2.6. Database Replacements

Database replacement values let you change database connections for your labels, solutions, and Automation configurations when switching between multiple database servers.



#### **NOTE**

To configure database replacements, you must log on to Control Center as an Administrator.

Database connection string replacements let Control Center users configure solutions where parts of database connection strings change while solutions run with connected databases. After running database connection string replacements, your solution still uses the unchanged database configuration, but actually connects to a different database server.



Database replacements enable users to configure actions in development environments, and run those actions in production environments without any database configuration changes.



#### NOTE

Database replacement is possible with solutions and configurations that run in NiceLabelPrint, NiceLabel Web Client, and NiceLabel Automation.

Configuring database replacements define your "from-to" replacement pairs. Each replacement pair contains **Value from** and **Value to** elements. During actions, **Value from** strings become **Value to** strings. The number of replacement pairs is not limited.

- To add new database replacements, open Control Center and go to Administration >
   Database Replacements.
- 2. Click Add+. The Database replacements page opens.
- 3. Type the **Replacement name**. Make the name descriptive so you can easily find the replacement later.
- 4. The **Find text** field lets you search for the existing From element of the replacement pair. This is the database connection string you are replacing.
- 5. Type **Replace with**. This is the <To> element of the replacement pair. This is your final database connection string.
- 6. Click **Save**. Your new replacement is active and listed on the **Data replacement** page.



#### NOTE

After you click **Save**, database replacements require up to 10 minutes to take effect.

#### **Example**

Your action in NiceLabel Automation connects to mySQLServer and myDatabase. You want to update your database connection string to use the database NEW\_myDatabase on the server NEW\_mySQLServer.

You must define two replacements – the first changes the server name, and the second changes the database name.

- 1. Add the first replacement and name it **Server name replacement**.
- 2. Type in the Find text field: Data Source=mySQLServer

- 3. Type in the Replace with field: Data Source=NEW\_mySQLServer
- 4. Add the second replacement and name it **Database name replacement**.
- 5. Type in the **Find text** field: Initial Catalog=myDatabase
- 6. Type in the Replace with field: Initial Catalog=NEW\_myDatabase



All database replacements are encrypted in the Control Center database. This ensures secure replacement of sensitive data, such as user names, passwords and network addresses.

### 2.2.7. Global Variables

Global variables are shared among multiple label printing users and printing applications. Global variables are defined outside the current solution and can be used between different solutions. The locking mechanism takes care that each print request gets a unique value for the global variable. Usually, global variables work as unique counters – they automatically remember the last used value when printing.

Each global variable has a unique internal ID number. This number identifies the global variable within a solution.

Available actions for the global variables:

- To create a new global variable in Control Center, click Add new global variable.
- To edit the existing global variable, click the *pencil* button.
- To delete the global variable, click the cross button. Removing global variable is irreversible
  process. If you remove a global variable that is still in use in some solution, that solution will raise
  an error.

You can create global variables in NiceLabelDesigner or in Control Center. After you design a label or solution that uses global variables, you must define which global variables are you going to use. NiceLabelDesigner can either work with global variables that are stored locally in the Globals.tdb file, or with global variables that you created ad stored in the Control Center.

To select the right source of your global variables in Designer, go to **File > Options > Global Variables**. Details on how to create, configure and use the global variables in Designer are available in NiceLabel 2019 User Guide.



To use the global variables from your Control Center, make sure Designer and Control Center are connected.

## 2.2.7.1. Setting Global Variable Properties

- ID. This is the internal ID number. This must be a unique number.
- Name. Variable name.
- **Description.** Optional variable description.
- **Current value.** This is the value the variable will use next time when needed. You can update the default value, when needed.
- Prefix/suffix. Prefix is a string added in the front of the variable value, suffix is added to the end.
- Min/max value. Defines the minimum and maximum values the variable can occupy.
- **Rollover.** Specifies to restart at the minimum value when the maximum value has been reached. You would use this option for counters.
- Length. Specifies the maximum number of characters the variable can occupy. Enable **Fixed** length, when the value must contain the exact number of characters.
- **Data format.** Specifies the type of characters that are allowable.
- **Padding.** Specifies the optional characters around the value to fill-in values to the variable maximum length. You can enter the custom pad character. For example, you would use it to add leading zeroes to numeric values.
- **Increment type.** Specifies the counter type. Step determines the value that counter will change for. Count determines the number of labels upon which the counter will change its value.

## 2.2.8. Alerts

Alert configuration is done using a Web wizard. The wizard guides you through all essential settings in 4 intuitive steps, prompting the user to enter the required settings for each of the alert types.



#### TIP

Wizard steps are dynamic and change depending on the type of alert being created. Each of the alert types requires a different set of information items.

When configuring the event monitoring, select **Basic configuration** mode and select the type of raised alerts you want to keep an eye on:

- NiceLabelDesigner errors during production: if printing from NiceLabel 2019Designer on a connected workstation reports an error, it raises an alert.
- **NiceLabelPrint errors during production:** if printing from NiceLabel 2019Print on a connected workstation reports an error, it raises an alert.
- Automation errors during production: if printing from NiceLabel 2019Automation Builder on a connected workstation reports an error, it raises an alert.
- **License violation:** if a license violation is reported from any of the connected workstations, it raises an error.



#### **TIP**

License violation results from exceeded number of allowed printers or from exceeded number of allowed NiceLabel 2019 installations per license.

The second available option is to select **Advanced configuration** module using which you can finetune the monitored parameters such as applications, error types, severity and list of workstations you want to monitor.

After you're done with the alert configuration, send a test alert to check if alerting works in case of a real emergency. The alert is saved and activated – it begins monitoring the system for the configured error events. Once an error occurs, the alert sends a notification to the addressee, and the alert event is logged in the **History** section. For more information on the event log, see History.

#### 2.2.8.1. E-mail alert

This alert sends a custom email message to the specified email address. You can customize alert email header and its content.

The suggested (default) message contains all available variables that can be used. The content can be adapted to fit your purpose during alert setup.

The available email content categories (variables) are:

• Error message: [ErrorMessage]

• Error details: [ErrorDetails]

• Module: [Module]

• Label file name: [LabelFileName]

• Printer name: [PrinterName]

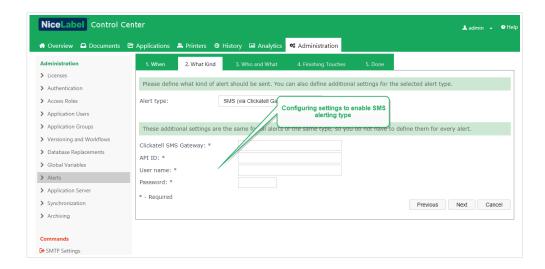
• **Error time**: [ErrorTime]

• Link to the error: [ErrorUrl]

• User: [User]

#### • Workstation: [Workstation]





# 2.2.9. Synchronization



#### **TIP**

The functionality from this section is available in Label Cloud Business and Label Cloud Unlimited.



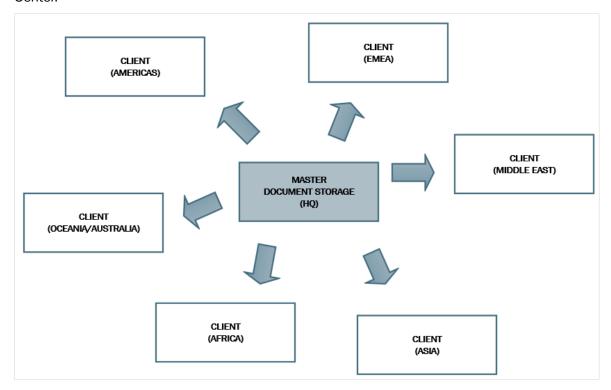
#### **NOTE**

The functions described in this section are available in **NiceLabel LMS Enterprise**.

The synchronization feature allows you to keep Document Storage from two or more Control Centers in sync. All changes from the master Document Storage are propagated to the replicated Document Storage, which contains the exact copy of all published folders and files.

This functionality is frequently used for the following purposes:

Synchronization of files on geographically distributed locations. In this case you have a
master server set up in the company's HQ. The label design is done centrally. The label approval
is also done centrally. When the labels are approved (and published), they must be distributed to
all production environments. All remote Control Centers are set as clients to the master Control
Center.



 Synchronization of files of multiple stage deployments (development > test (Quality Assurance) > production). In this case, the files must travel in the chain from the development towards the production environment. Control Center in the Development environment is master to Control Center in the Test environment and Control Center in the Test environment is master to the Control Center in the Production environment.



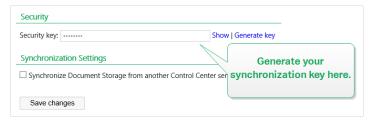


When the synchronization is enabled, the Document Storage in the client Control Center switches to read-only mode. You cannot add & remove folders and files. You can change the workflow type for the folder and change the workflow steps for the files within that folder. You can also delete files from the replicated Document Storage. However, the deleted files are synced from the master Document Storage in the next synchronization interval.

## 2.2.9.1. Synchronization Rules

These are the main rules that synchronization procedure will follow:

- The synchronization is always configured and initiated on the client.
- You have to provide the security key that matches the security key on the master Control
  Center. The security key will allow access only to the authorized clients. You can click the
  Generate Key button to generate your security key, or type in your custom string of characters.



- · You can only synchronize files that are governed by some workflow process.
- The files that are in the final step of the workflow selected for the particular folder will be synchronized. The final workflow step is usually **approved** or **published**. This depends on the selected workflow.
- When the source files are synchronized on the client, they are placed in the initial state of the
  workflow which is defined for the folder on the client. Although the folder name is the same in
  Document Storage on both servers, the workflow process for this folder on the client can differ
  from the workflow process on the master.
- File revision number is synchronized as well. When the file in revision 10 on the master is synchronized with the client, it will retain revision 10 also on the client. Because not all revisions are approved/published, you can expect to have gaps in the revision numbers on the client.
- File decommissioning makes obsolete published file unavailable for read-only users. When
  client Document Storage synchronizes with master Control Center, the decommissioned
  approved files are copied from master Document Storage but are no longer marked as
  decommissioned in the client Document Storage. To make these files invisible for the read-only
  users also in the client Document Storage, decommission them manually. To learn how to
  decommission a file, see section Specific access permission options.
- Synchronization service periodically retrieves the list and states of files on the master and compares them with local copies. New files, files with higher revision numbers, and files which

have reached the final state in the approval process will be updated in the replicated Document Storage.

 Synchronization uses its own authentication method and bypasses the authentication mode configured in the master Control Center. The Control Center deployments do not have to belong to the same domain. All data exchange is encrypted.

## 2.2.9.2. Enabling Synchronization

To enable the synchronization, you have to do the following:

- 1. Open Control Center page.
- 2. Go to Administration > Synchronization.
- 3. Enter the security key (token) as is defined on the master Control Center.
- 4. Enable Synchronize Document Storage from another Control Center server.
- 5. Select folder synchronizing option:
  - **Synchronize all folders:** synchronizes all published files and folders of the replicated document storage with the master Control Center document storage.
  - Synchronize the following folders: defines which folders in the replicated document storage should synchronize with the master Control Center document storage.



#### TIP

Add each folder in a separate line, i.e.

/Labels/Folder 1

/Labels/Folder 2

- 6. Set destination document storage state:
  - **Document Storage is read only:** if enabled, this option makes the replicated document storage operate in read-only mode. This means that the synchronized folders and included documents cannot be changed. To allow adding additional folders or files to the replicated document storage, disable this option.



#### **WARNING**

Synchronized files always overwrite their locally modified copies.

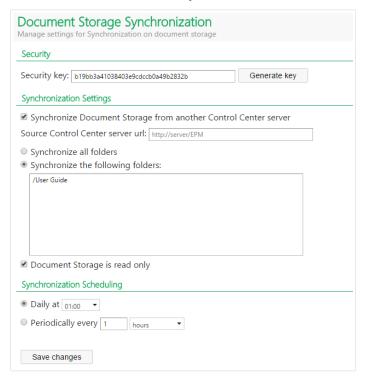
7. Enter the URL to access the master Control Center.

Use the syntax:

http://account.onnicelabel.com/dashboard

... where account is the name of your Label Cloud account.

8. Select time interval in which synchronization must occur. There are two options:



- **Daily.** The synchronization will occur daily at specified time. You can select one predefined value, or enter your own time.
- Periodically. The synchronization will occur periodically in defined time interval (minutes, hours or days).
- Click Save changes.

# 2.2.9.3. Logging Synchronization Activity

After each synchronization cycle, the information about sync action will be added to the **Application** event log. The report will contain the following information:

- · Start time of sync.
- End time of sync.
- The list of synchronized files (file name, revision).

## 2.2.10. Account Information

Details about your account and the license plan your Label Cloud runs under, as well as information about the amount of stored data are available on the **License Information** page.

**Account Information** contains your Label Cloud account and license plan details:

• Account name is the name of your Label Cloud account.

- Edition tells you what NiceLabel license plan you are using.
- Printer limit is the highest number of printer seats that the clients in your Label Cloud can use.
- Used printers tells you how many printer seats are currently in use in your Label Cloud. Click the
  number to go directly to the Licensed Printers page. This is where you see exactly which printers
  are in use.

**Label Cloud Notifications** Email addresses you add here receive important Label Cloud notifications for your account. Your account administrator email address is added automatically. You can add more email addresses on new lines. Remove email addresses to stop receiving notifications.

**Document Storage** monitors usage of cloud document storage (**Documents** tab) resources.

• **Used space in Document Storage** tells you the amount of data stored in your cloud Document Storage.



#### NOTE

The amount of available storage space depends on your current Label Cloud license plan.

**History** displays the duration of log data cleanup intervals. Your time interval depends on your subscription. After this period, your database data is archived. You can download your archived data for a time period depending on your subscription level.

- **Data retention** tells you how long the history log is available online. This depend on your subscription level.
- Download data archive click to download your database data in Microsoft Access format (.mdb).

**Azure SQL database for your content** displays information about the cloud dynamic data storage for your labeling environment. Read more in section Azure SQL database for your content.

# 2.2.10.1. Cloud database for your content

The **Cloud database for your content** is an integral part of your Label Cloud. This database allows you to establish a secure, centralized and universally accessible dynamic data storage for your cloud labeling environment. This is the database that your Label Cloud users can work with when they design and share their labels or solutions.

#### **Example**

If you are designing food labels with automatically highlighted allergens on the ingredients list, you can store the allergens' data in your Cloud database. At print time, your NiceLabel client (Designer, Print, or Web Client) retrieves the data from the Cloud database, and prints the labels with highlighted ingredients that are marked as allergens.



The amount of available database space depends on your account. Please contact your NiceLabel sales representative for more details.

To make the **Cloud database for your content** ready:

- 1. Go to Administration > Account Information > Cloud database for your content.
- 2. Click the Create labeling database button. The New labeling database window opens.
- Type in your user name and set the password. You will need these credentials later when connecting to the Cloud database from your labels, solutions, or configurations. The credentials are also mandatory if you want to connect to the database using your database editing software.



#### NOTE

You can connect to the Cloud database using any compatible SQL tool. NiceLabel recommends SQL Server Management Studio.

- 4. Click **Create**. After a few moments, the window closes. Your database is ready. The information in the **Cloud database for your content** section displays:
  - · Status: creation date of your Cloud database.
  - Connection string example displays the connection string format for your Cloud database in the cloud. To connect your NiceLabel clients this database, adapt the example connection string with your Label Cloud account user name and password.

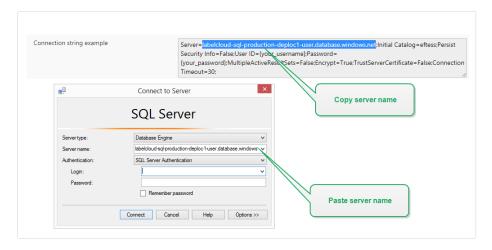
To connect to your Cloud database:



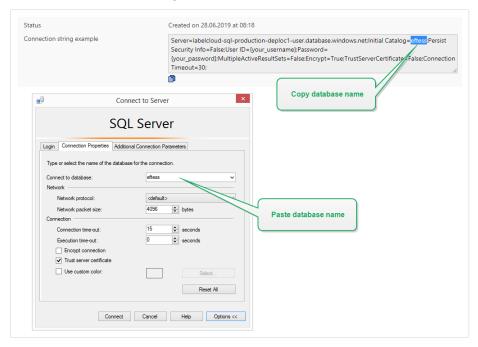
#### NOTE

Before you continue, install Microsoft SQL Management Studio on your computer.

- 1. Open Microsoft SQL Management Studio.
- The Connect to Server window opens. Copy the Server name from Connection string example.



- 3. Set Authentication to SQL Server Authentication. Type in your database credentials.
- 4. Click the **Options >>** button. Open the **Connection Properties** tab. Copy the database name from the **Connection string example** to the **Connect to database field**.



5. Click Connect. You can now work with the Cloud database.

# 3. Using Control Center

# 3.1. Opening Control Center

NiceLabel Control Center application is designed as a web page, to capitalize on the benefits of remote and centralized access offered by such application design. To start NiceLabel Control Center, open your browser and type in the following address.

http://account.onnicelabel.com/dashboard

... where account is the name of your Label Cloud account.

### First time sign in to cloud Control Center

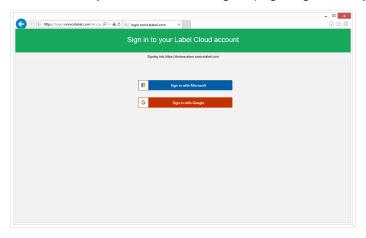
When signing in to Label Cloud for the first time, you have to activate your account first using the sign up procedure.

If you interrupt the sign up after clicking the link, contact NiceLabel sales to receive a new invitation email, and repeat the procedure.

The sign up procedure is necessary only during your first time sign in.

### Complete these steps:

- After you receive the Label Cloud invitation email from your NiceLabel sales representative, click the sign up link.
- 2. The link takes you to the account sign in page. Sign in with your Microsoft or Google account.



If you don't have Microsoft or Google account yet, create a new one following the on-screen instructions.

- 3. After signing in successfully, click Continue.
- 4. The cloud Control Center page opens in your browser.

#### Normal sign in

After activating your Label Cloud account, you only have to sign in each time you start working with your cloud Control Center.

To sign in to your cloud Control Center:

- Go to the Label Cloud sign in page. By default, the page is accessible at: https://account.onnicelabel.com/dashboard, where account is the name of your Label Cloud account.
- Sign in with your Microsoft or Google account.
   If you own multiple Microsoft or Google accounts, pick the one that you used for activating the Label Cloud.
- 3. Type password and click **Sign in**.
- 4. The cloud Control Center page opens.

The visibility of the tabs depends on the user privileges.

# 3.2. Overview

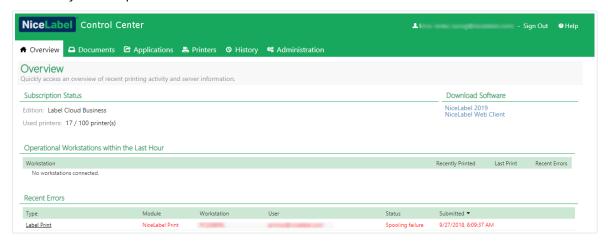
When you open the NiceLabel Control Center, the **Overview** page opens. It is s a summary page that displays the current system status:

- Subscription Status gives you license use information:
  - **Edition** shows what kind of license is active for your Label Cloud. To read which features does certain edition allow you to use, visit the NiceLabel feature overview web page.
  - Used printers tells you how many printer seats are in currently in use. The Label Cloud license counts the used printer seats. You can print on as many printers as your license allows you to.
- Operational Workstations within the Last Hour tells you how many computers with NiceLabel applications that are signed into your Label Cloud have been active during the last hour. If the NiceLabel 2019 is signed into the Label Cloud, the cloud Control Center automatically starts tracking its actions and events:
  - Workstation is the name of the computer that runs NiceLabel 2019 signed in to the Label Cloud.
  - Recently Printed is the number of print jobs.
  - Last Print is the time of the last print job.
  - **Recent Errors** gives you the number of reported errors.



If you click the magnifier icon next to the header row, Control Center redirects you to the **History** tab. This is where you see the details for each event.

- **Recent Errors** is a detailed list of errors reported in the last 24 hours from computers signed in to Label Cloud.
- Download Client. Click the links to download and install NiceLabel 2019 and NiceLabel Web Client on your computer.





### **PRODUCT LEVEL INFO:**

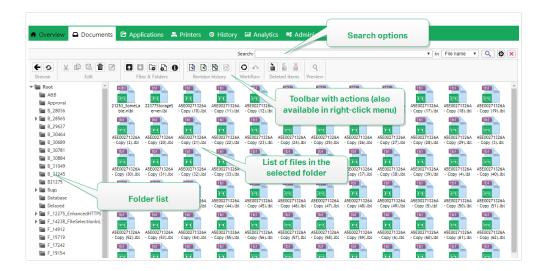
NiceLabel Automation is available with Label Cloud Business and Label Cloud Unlimited editions.

# 3.3. Documents

# 3.3.1. Document Storage

Control Center includes the document storage feature, which is a shared file repository on the server, from where the users can store and retrieve their files. While the basic functionality may resemble a shared location on a network, this storage is on a web-based application. It can be shared to a much broader public and accessible from anywhere in the world, not limited to local area network.

Document Storage supports all file extensions, not just NiceLabel-related file types.





Availability of options shown on the screen shot depends on the Control Center product edition.

This section explains how to:

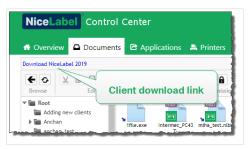
- · Work with your Document Storage.
- · Search for files and label data.
- · Preview your labels.
- · Move the files.
- · Get file properties.
- · Access your files.
- Open files using WebDAV or HTTP syntax.
- · Access the database files in your Document Storage from Web Printing.

# 3.3.1.1. Working with Document Storage

You can control the Document Storage items using commands in the Toolbar above the contents area. The Toolbar mimics the functionality of a ribbon and uses icons that are easy to understand.

- You have to upload the files into the Document Storage, before you can use them.
- You can organize files into folders.
- You can select the item display mode from icon to list view.
- You can preview all label files. The image preview will appear in a dialog box.
- You can right-click the items to execute commands upon them and see their properties.

 You can download NiceLabel 2019 directly from the Document Storage and install it on your computer.



The commands in the Toolbar change if you enable functionality that is not enabled by default, such as revision control, workflows, and access permissions.



#### NOTE

You can also right-click folder and files, and use commands in the context menu.



### **TIP**

For best user experience using the Document Storage, make sure to install the Browser Extension, when prompted so.

Document Storage remembers which was the last viewed folder during your most recent session. This makes your work with stored documents easier and more time efficient.

After you view a certain folder and leave Document Storage, Control Center will automatically select the same folder next time you visit Document Storage.

# 3.3.1.2. Searching for Files and Label Data

If you have to find a particular label file either based on the file name mask or filtered by some content, you can use the search pane in the Document Storage.

When used, only the files that contain entered string (in the file name or in the file contents) will be displayed. The folder tree also shows only the folders that match the search criteria or contain sub items (file or sub folders) that match the criteria. You have to press **ENTER** to confirm the entered string.

- **Search by file name.** When you enter a string, Document Storage filters out the displayed items. You will see all folders and files that contain the entered string in their names.
- Search by file contents. When you enter a string, Document Storage will display the label files that contain the string anywhere in their content, such as all fixed content for text and barcode objects and names of all variables (and their description, default value and prompts).

To clear the filter, click the Clear search button.

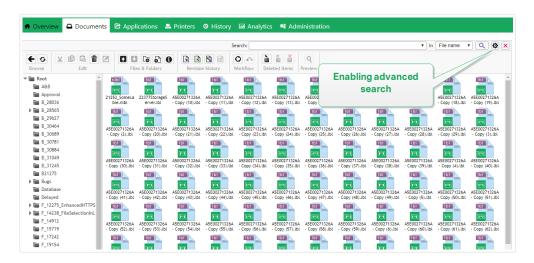
When the Document Storage displays filtered results, this is indicated by a different color of the search toolbar. All files are again shown when you click the **Clear search** button or presses **ESC**> key.



### **NOTE**

The partial search is enabled by default. When you enter word **lab**, the result will include **label** and **laboratory**. To disable partial search, enter the keyword inside the double quotes, like this **"lab"**.

You can narrow your search by enabling the advanced searching functionality.



In this case you can search by specific fields either inside the label meta-data, structural information or workflow steps.

Advanced search functionality allows search queries, such as the following:

- Find all files that contain string LV in the file name and have text object containing text Batch.
- Find all files that need to be approved (search for by specific workflow step name, such as **Request approval**).
- Find all labels with dimensions 10×7 cm.

User can enter the following search keys for advanced search functionality:

### **Example**

Name, Author, Description, PrinterName, PrinterDriver, Width, Height, WorkflowStep, Object, ObjectContent, Text, TextContent, TextFont, Barcode, BarcodeContent, BarcodeType, Graphic, GraphicPath, Variable, VariableDescription, VariableDefaultValue, VariablePrompt

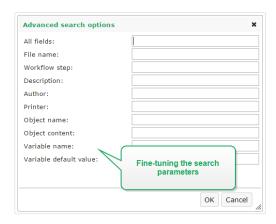
After the search keys you have to enter color character (:) followed by the actual keyword. You can search by concurrent fields, make sure to delimit them with space character.

The following example searches for label that contains both **MyPrinter** and **660** in the printer name and contains a variable named **Counter1**. Label must also contain an EAN barcode.

### **Example**

PrinterName:MyPrinter PrinterName:660 Variable:Counter1 BarcodeType:EAN

Last 10 search terms are saved and suggested to the user when he starts typing in the search field.



# 3.3.1.3. Previewing Label Files

You can preview the label files directly in the Document Storage without opening the label in designer.

To see the label preview, do the following:

1. Select the label file.

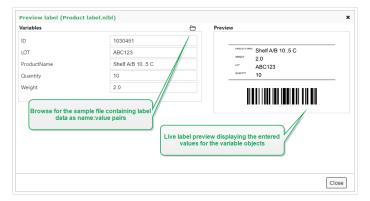


### **NOTE**

You cannot preview solution (.NSLN files).

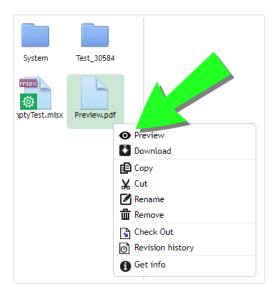
2. Click the Preview button in the Toolbar.

You can also right-click the label file and select Preview label in the context menu.



Control Center also preview images and PDF files. Double-click or right-click the file, and click **Preview**. You can preview files with extensions .bmp, .png, .jpeg, .gif, .tif, .wmf, .emf, and .pdf.

The preview opens in a new tab of your web browser.



If you work with file revisions, you can open label previews of any revision from the **Revision history** for the selected label.



### NOTE

When opening the label preview, you can enter the values for variables and see how they are used in the label template. You can also use values from a data file.



### NOTE

Label preview is generated by the installed printer. If the printer does not exist, a virtual printer is used instead.

# Applying Values From Data Files to Variables

The label templates are usually designed with variables that don't have any default value defined. This ensures that there are no hard coded values that would be used during printing. On the other hand it makes the label preview and comparison more difficult task, because you have to provide the values for variables before the label preview is generated. When generating the label preview, you can enter values manually.

You can also provide the external data file with a list of variables and their values and NiceLabel Control Center will automatically use it for the label preview. The data file must provide the *name:value* pairs. There must be name of the variable and there must be value for the variable. All pairs are read from the data file and values sent to the variables of the same name defined in the label. If the variable of the same name is not defined in the label, the *name:value* pair is discarded.



You can let Control Center find the data file based on the rules defined below, or you can click the folder icon next to the label name/preview and override the defaults with your data file.

#### Data file structure

The contents for the variable data can be provided in either of the two available structures.

#### XML structure

The variables are provided within **<Variables** /> root element in the XML file. Variable name is provided with the attribute name, the variable value is provided by the element value.

#### **Delimited structure**

The variables are provided in a text stream. Every *name:value* pair is provided in a newline. Variable name is to the left of the equals character (=), variable value is to the right.

```
Variable 1=Value 1
Variable 2=Value 2
Variable 3=Value 3
```

#### Data file naming convention

The name of the data file can be the same as the name of the label, but using the extension .values. This private data file allows you to provide different data file for each label.

If you have a label named label.nlbl, the data file must be named label.values.

The other option is to use the same generic data file for all labels. In this case, name the data file default.values. The name:value pairs within will be used for all labels.



### **NOTE**

If both files exist in the same folder, the file label.values will take precedence over the file default.values.

#### Data file location

You can store the data file in various locations in the Document Storage.

### **Example**

The label label.nlbl is saved in the folder / folder1 and therefore available as /folder1/label.nlbl.

The searching for a data file is executed in the following order.

1. The private data file in same folder as the label file.

### Example

/folder1/label.values

2. The private data file in the subfolder Sample Values.

### **Example**

/folder1/SampleValues/label.values

3. The generic data file in the same folder as the label file.

### **Example**

/folder1/default.values

4. The generic data file in the subfolder Sample Values.

### **Example**

/folder1/SampleValues/default.values

When the first available .values file has been found, the search stops and contents of the data file is used for the label preview.



### NOTE

Using the **sampleValues** subfolder is useful when you have a workflow process defined in the label folder, but you do not want the same workflow to govern your data files. In this case, you can store the new version of the data file without going through all workflow steps.

# 3.3.1.4. Moving Files

To move a file to a different folder while keeping all its revision and associated comments, do the following:

- 1. Select the file.
- 2. Click Cut icon in the toolbar.
- 3. Move focus to a folder into which you want to move the file.
- 4. Click Paste icon in the toolbar.



You can also select multiple files and folders for moving. When you select folders, all its content is moved (files and sub folders).

### 3.3.1.5. Getting File Properties

You can obtain the file properties, such as file name, file type, size, creation and modification date, name of last user that modified the file, file permissions, selected workflow for this folder, workflow step in which the file is, check out status and revision number.

To see file properties, do the following:

- 1. Select the file.
- Click the **Get info** button in the Toolbar.
   You can also right-click the file and select **Get info** in the context menu.

# 3.3.1.6. Accessing Files

### Accessing files using browser

You can use Control Center Web interface to interact with files inside the Document Storage. This is the access method if you want to grant access to Document Storage to users, connecting from external locations (such as the Internet). In this case, make sure that your firewalls allows inbound connections to the Control Center.



#### NOTE

If you have NiceLabel client locally installed, double-clicking the label (.NLBL) or solution file (.NSLN) will open it in the **Designer**. The options to Edit or Print & Run files is also accessible in the right-click menu.

### **Accessing files using NiceLabel Client**

The users can use the **File > Open** dialog box in NiceLabel software to interact with the files in the Document Storage. The users can also use their favorite file manager, such as Windows Explorer. When you activate NiceLabel client with a license from Control Center, the shortcut to the Document Storage is added to user's Favorites. This shortcut becomes accessible in Explorer and every Windows file-managing dialog box.



If you are using the application authentication on your Control Center, the users that work with NiceLabel 2019 applications, must type their credentials each time they start Designer, Automation or Print.

# 3.3.1.7. Opening Files Directly

### Using the HTTP syntax

You can use the following HTTP syntax to open files:

https://<account>.onnicelabel.com:8080/folder/label.nlbl

### 3.3.1.8. Using Custom Fonts

If your company is using custom fonts for labeling, you can upload and store these fonts in your document storage. This is how you can store your custom fonts on a universally accessible and manageable central location.

The dedicated font storing location in your document storage is /System/Fonts. This where your Control Center takes the fonts for label previews.

To upload your custom fonts to document storage:

 Go to **Documents** tab > **System > Fonts** folder. If the **Systems** folder does not exist yet, create one at the root level and create a subordinate **Font** folder.



2. Upload your folders to the **System/Fonts** folder.



This makes custom fonts ready for your labels.



Make sure you have the legal right to use the uploaded custom fonts before you design and publish your labels.



#### NOTE

You cannot use custom fonts with the Text on ellipse effect. Read the NiceLabel 2019 User Guide for more details.



### **NOTE**

To use custom in the Rich Text Box object, make sure you enable the **Alternate rendering** option. Read the NiceLabel 2019 User Guide for more details.

### 3.3.2. File Access Control

Set access permissions to your individual folders with file access control. This is useful when you want to limit access to certain folders in Document Storage to specific groups of users. You can customize access permissions for folders and subfolders by specific access roles and apply them to all role members.

### 3.3.2.1. Access Control Rules

These rules define access control in Document Storage:

- You set access control for folders with access roles. Users can be members of multiple roles that affect how you can read, write, edit, and delete documents in document storage.
- All permissions you set for a folder apply both to folder contents and to subfolders.
- Subfolders inherit permissions from parent folders, or you can set custom permissions for each subfolder.

### 3.3.2.2. Additional Workflow-related Access Control Rules

When specific workflow processes apply to folders, these additional rules apply:

• If you have read-only access to a folder, you can only read the last approved-published revision for files. If files are not yet approved-published, you cannot read them at all. Configure access privileges by access roles.



Users in production environments must have read-only access to ensure they see only approved-published revisions.

· When you have full folder access (read and write permissions), you can read any file revision.

### 3.3.2.3. Changing access permissions for folders

Access permissions for folders depend on user roles. To set general access permissions or custom permissions for specific folders and subfolders, use access role permissions in Control Center.



#### NOTE

Make sure you enable user login for Control Center.

You can set folder permissions by selecting individual folders in **Documents** or by editing **Access Roles**.

To change folder permissions from **Documents**:

- 1. Go to Control Center > Documents.
- 2. Right-click the folder you want to edit and click **Folder permissions**. Your folder permissions window opens.
- 3. Click **Edit** near the role you wish to edit. The Access Role permissions page opens.
- 4. Choose the permissions you wish to change and click **Customize**.
- 5. Click Save.

Your new folder permissions now apply to your selected folder.

To change folder permissions from **Access Roles**:

- 1. Log in to Control Center as an administrator.
- Go to Administration > Access Roles and click a role to customize from the list. To add a new role, click + Add.

The Access Role configuration page opens.

- 3. Go to Permissions for this role > Documents tab to set:
  - General document permissions for all folders
  - Default document permissions for all folders, including storage and workflow permissions
- 4. To set custom permissions for specific folders or subfolders, go to **Custom document permissions**.

- Select a folder to customize and click Customize.
   Control Center opens the Customize permissions dialogue for the folder you select.
- 6. Click specific storage and workflow permissions to apply to this role and folder.



Access role settings you change for this folder apply to all users in the access role.

7. Click Customize.

Permissions you set for this role and folder now display in the **Custom permissions** section of **Custom document permissions**.

8. Click **Save** (on your top right) to save your settings and continue working.

Custom folder permissions you set are saved and now apply for all access role members.

### 3.3.2.4. Specific access permission options



### **NOTE**

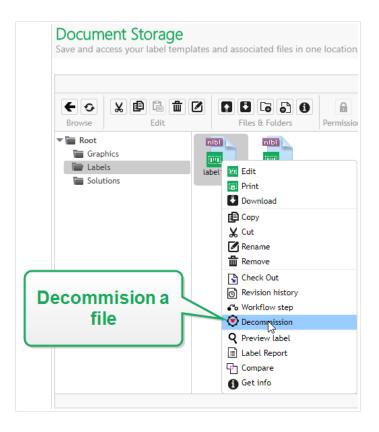
The functions described in this section are available in NiceLabel LMS Enterprise.

### **Decommissioning a File**

If a published label or solution file becomes obsolete during its life cycle, decommissioning allows you to make the file unavailable for read-only users. Decommissioning makes deleting an obsolete file from the document storage unnecessary. This option just hides the obsolete file and, if necessary, makes it available again using recommissioning.

To decommission a file in the Document Storage:

 Right click the file to display the context menu and click **Decommission**. The confirmation window pops up.



2. Click **OK** to continue. The confirmation window opens. Type in the reason why you are decommissioning the file.

After you have decommissioned the file, an icon appears next to the file in the Document Storage (see the green arrow in the picture below). This icon indicates that the file is no longer visible to the read-only users.

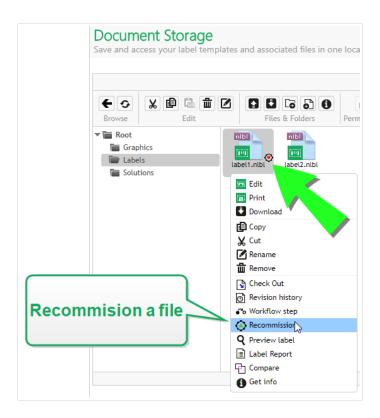


### **NOTE**

You can decommission a file even if it is not currently published. This option is available also for files that are still in approval process or have been unpublished in the past.

If you decide to make the decommissioned file visible again, recommission it:

Right-click the document to display the context menu and click Recommission.



2. Click **OK** to continue. The confirmation window opens. Type in the reason why you are recommissioning the file. The file is again visible to the members of access roles with readonly privileges.



### **NOTE**

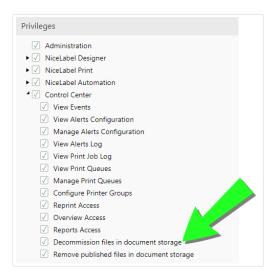
Authentication must be enabled on Control Center to make file decommissioning possible. Supported authentication types are: Windows, Application and External authentication.



### **NOTE**

You can view the decommissioning/recommissioning actions and their details in Control Center history.

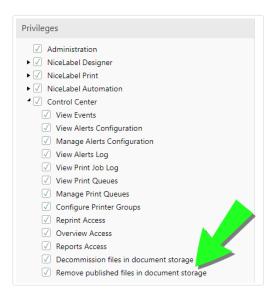
By default, members of Administrator and Approver access roles are allowed to decommission files. To allow other user roles to perform this action, go to **Administration > Access Roles >** select the access role > **Application Permissions > Control Center**. Scroll to **Decommission files in document storage** to allow or deny this option to the members of this access role.



# 3.3.2.5. Removing published files

By default, only members of Administrator access role can remove a published file from Document Storage. However, the Administrators can allow any other access role to remove the published files.

To grant the selected access role the right to remove published files from Document Storage, go to Administration > Access Roles > select the access role > Application Permissions > Control Center. Scroll to Remove published files from Document Storage and select this option.





### NOTE

You can remove an entire folder that contains published files. If you do not have the permission to delete the included files, an error dialog with a list of files that cannot be deleted pops up.

# 3.3.3. Label Report

You can use label report feature to create a detailed description about the structure of the selected labels. At the same time, the label preview is generated for the visual reference on the label design.

When the label report is selected, a new tab will open in the browser and will contain detailed information about the selected file(s). You can initiate the report on the single file, group of files, the contents of the entire folder and on the specific revision of the label file.

The report will contain label's meta-data (name, author, description and commit comment), label structural information (list of fixed objects and variables with their contents), and label preview. You can use the provided information to build a label catalog, a list of all labels you use in your environment. This will help you keep track on the number of labels, their structure and intended usage. Before creating a new label template, you can verify your label catalog if a similar label has already been created. You could use the existing label as a master template for a new label.

If you need the label information saved in your existing business & informational system, you can download the provided label structure in the XML file and upload it to your system.



### NOTE

If you have generated report for several labels, you can download XML files for individual labels, or one XML file containing definition of all displayed labels.



# 3.3.3.1. Executing the Label Report

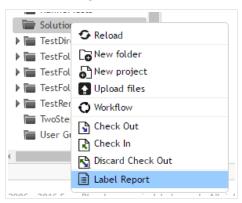
You can invoke the label report from several locations within the user interface:

1. **On the selected label file(s).** You can select one or several label files, right-click on them and select Label Report. The report will display in another tab inside your browser.

To select several files click and hold Ctrl key while selecting files.



2. **On the selected folder.** Select the folder, then right-click it and select **Label Report**. The report will be generated for all label files in this folder and all its sub folders.



3. **For a specific revision of the label file.** In the file revision history window click on the document icon to create label report for that particular revision of the label file.



# 3.3.3.2. Label Report Contents

For each label document, the following contents will be shown:

### Label meta-data

- · Label name
- Author (the user that last uploaded or modified the document in the Document Storage)
- Title
- Description
- · Revision number
- Committed by
- · Commit comment
- Printer name
- · Printer driver name
- · Label dimensions (width, height)
- · Current workflow step

### **Preview label**

• Label preview provides preview of the saved label with assigned data.

Label preview is generated by the installed printer. If the printer does not exist, a virtual printer is used instead.



### **NOTE**

If a stored label has **Prevent font replacement** option enabled, label preview becomes unavailable in case of missing fonts. See NiceLabel Designer User Guide for details.

### **Label contents**

 Workflow step log. Logged information related to the assigned workflow: date, user, data, comment.



### **NOTE**

This segment is visible only if the workflow is set for the selected document.

- Properties of all fixed text objects. Object name, font, size, content.
- Properties of all fixed barcode objects. Object name, barcode type, content.
- Properties of all fixed graphic objects. Object name, path and file name to the used image.
- Properties of all variables. Name, description, default value, prompt.

# 3.3.4. Comparing Label Files



### **NOTE**

The functions described in this section are available in NiceLabel LMS Enterprise.

This feature provides an ability to graphically compare different label files, or different revisions of the same label file.

Graphical comparison is a great tool whenever you are interested in the changes between label designs. This information might already be provided in the comment field required during each checkin process, but perhaps the detailed level is not satisfactory. The tool will display all selected labels and/or revisions of a single label as thumbnails. You can select the left and right label/revision for comparison. Both selected labels will display on top, followed by a third image of both preview superimposed.

The color-coding allows for all differences to be easily spotted.





Graphic comparison is available for label (.NLBL) files only.

# 3.3.4.1. Comparing Different Label Files

To compare different label files, do the following:

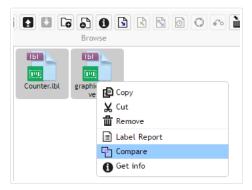
1. Select two or more labels in the same folder.



### **NOTE**

Hold Ctrl key while clicking labels to select multiple labels.

2. Right-click the labels and select **Compare**.

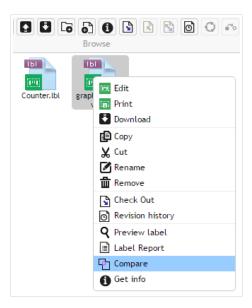


3. Select the left and right label for comparison. The superimposed image of label differences will be shown below the preview of the two selected labels.

# 3.3.4.2. Comparing Revisions of the Same Label File

To compare revisions of the same label file, do the following.

1. Right-click the label that has at least two revisions and select **Compare**.



2. Select two revisions for comparison. One for the left preview, one for the right preview. The superimposed image of label differences will be shown below the preview of the two selected labels.

### Applying values from Data Files to Variables

The label templates are usually designed with variables that don't have any default value defined. This ensures that there are no hard coded values that would be used during printing. On the other hand it makes the label preview and comparison more difficult task, because you have to provide the values for variables before the label preview is generated. When generating the label preview, you can enter values manually.

You can also provide the external data file with a list of variables and their values and NiceLabel Control Center will automatically use it for the label preview. The data file must provide the *name:value* pairs. There must be name of the variable and there must be value for the variable. All pairs are read from the data file and values sent to the variables of the same name defined in the label. If the variable of the same name is not defined in the label, the *name:value* pair is discarded.



#### **NOTE**

You can let Control Center find the data file based on the rules defined below, or you can click the folder icon next to the label name/preview and override the defaults with your data file.

#### Data file structure

The contents for the variable data can be provided in either of the two available structures.

#### XML structure

The variables are provided within **<Variables** /> root element in the XML file. Variable name is provided with the attribute name, the variable value is provided by the element value.

#### **Delimited structure**

The variables are provided in a text stream. Every *name:value* pair is provided in a newline. Variable name is to the left of the equals character (=), variable value is to the right.

```
Variable 1=Value 1
Variable 2=Value 2
Variable 3=Value 3
```

#### Data file naming convention

The name of the data file can be the same as the name of the label, but using the extension .values. This private data file allows you to provide different data file for each label.

### **Example**

If you have a label named label.nlbl, the data file must be named label.values.

The other option is to use the same generic data file for all labels. In this case, name the data file default.values. The name:value pairs within will be used for all labels.



### **NOTE**

If both files exist in the same folder, the file label.values will take precedence over the file default.values.

### **Data file location**

You can store the data file in various locations in the Document Storage.

### Example

The label.nlbl is saved in the folder /folder1 and therefore available as /folder1/label.nlbl.

The searching for a data file is executed in the following order.

1. The private data file in same folder as the label file.

### **Example**

/folder1/label.values

The private data file in the subfolder Sample Values.

### **Example**

/folder1/SampleValues/label.values

3. The generic data file in the same folder as the label file.

### **Example**

/folder1/default.values

4. The generic data file in the subfolder Sample Values.

### **Example**

/folder1/SampleValues/default.values

When the first available .values file has been found, the search stops and contents of the data file is used for the label preview.



### **NOTE**

Using the <code>sampleValues</code> subfolder is useful when you have a workflow process defined in the label folder, but you do not want the same workflow to govern your data files. In this case, you can store the new version of the data file without going trough all workflow steps.

# 3.3.5. Revision Control System



### **NOTE**

The functions described in this section are available in **NiceLabel LMS Enterprise**.

Document Storage implements the revision control system for the labels, images, and related files. Over time, you will have a complete history of your files. The system allows you to work with revisions (version) of files, track changes made to the files, revert to the previous revisions, and restore deleted files.

Every time a designer wants to work with a label file, the file must be checked-out to the user. At this time, the file is locked to that user. Any other user can open the file in read-only mode only. When the designer checks-in the file, the new file version is created in the Document Storage. The revision number increments by one after each **Save** operation. The first file version is **revision 1**, the second **revision 2**, and so on. All previous revisions of the file are still available in the database. The designer can always access previous label revisions and make them active. For each check-in operation, the user can enter a comment describing the changes in the label design.

# 3.3.5.1. Adding files to Document Storage



### NOTE

Files you upload must be smaller than 100MB.

You must first upload files to the Document Storage to make them available for users:

- 1. Click the **Upload files** button in the Toolbar. The upload dialog opens.
- 2. Drag the files or folders to the upload dialog. You can also click the upload dialog to browse for the files that you want to upload.
  - Enable Overwrite existing files if you only want to keep the latest uploaded file version visible in your Document Storage.



### **NOTE**

If you disable the **Overwrite existing files** option, Control Center prevents uploading files with identical names. If you try to upload a file with identical file name, an error appears.

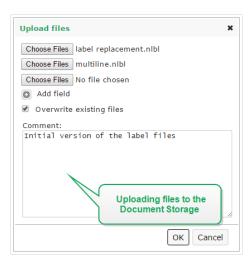
Each time you overwrite an existing file, you raise its revision number.



#### NOTE

To keep all file versions available, enable Versioning for your Control Center first.

- Use the Comment field to add a description about the newly added files or folders or their versions.
- 3. Enter the optional **Comment**. The Comment is recorded to the file log.



4. Click **OK**. Your files are ready in the Document Storage.

# 3.3.5.2. Checking Out Files

Before you can start editing the file, you have to check it out from Document Storage. The checkedout file is marked and locked for editing for any other user. All other users will see the current revision of the file, while the designer already works on a new draft. You can check out file from a Designer or from the Control Center.

To check out file from NiceLabel Designer, do the following:

- 1. In NiceLabel Designer, open the file from the Document Storage.
- 2. In Document Storage ribbon, click Check Out icon.

To check out the file in the Control Center, do the following.

- 1. In Document Storage tab, select the file you want to check out.
- Click the Check Out button in the Toolbar.
   You can also right-click the file and select Check Out in the context menu.
- 3. Double-click the file to open it in associated application. E.g. double-clicking the label will open it in NiceLabel Designer.

To allow other users making changes to the file, you have to check it back in, or discard check out operation. The methods are available in the NiceLabel Designer and in Control Center user interface.



#### WARNING

If you click **Discard Checkout**, you irreversibly lose all changes that any of the users did after checking out the file. To keep the changes, check in the labels or solutions first.

### 3.3.5.3. Checking Out Multiple Files

Use the standard Windows shortcuts with Ctrl key to select individual files. When you click the **Check Out** button, all selected files will be checked out simultaneously. You can also select **Check Out** command while you have a folder selected, or by right-clicking folders in the navigation pane (on your left). In this case all files in the folder will be checked out.

If an error happens during the processing, the user is informed about the details.

### 3.3.5.4. Checking In Files

When you are finished with editing the document, and want to make it available to other users, you have to put the file back into the Document Storage. The process is referred to by "checking-in the file". You can check in the file from NiceLabel Designer and in the Control Center.

When you check in the file, the file revision will increment by one. The entered comment is logged to file log.

To check in the file in NiceLabel Designer, do the following:

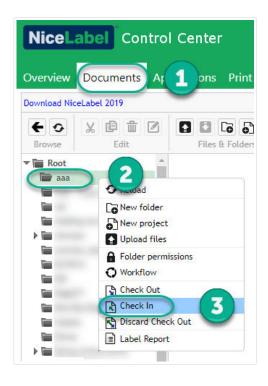
- 1. While the label is still opened in the Designer, go to Document Storage tab in the ribbon.
- 2. Click Check In icon.

To check in the file in the Control Center, do the following.

- 1. If you have downloaded the file and edited it locally, you have to upload the file back into Document Storage.
  - If you have opened the file in editor by double-clicking it, the edited file is already uploaded into Document Storage.
- 2. Select the file in Document Storage.
- 3. Click the **Check In** button in the Toolbar.
  - You can also right-click the file and select **Check In** in the context menu.
- 4. Enter the optional **comment**. It's a good practice to enter the comment describing the changes you did in the file.

# 3.3.5.5. Checking In Multiple Files

To check in all files in a folder:



- 1. Go to Control Center > Documents.
- 2. Right-click the folder you want to check in from the navigation pane (on your left).
- 3. Click Check In. Your Check In window opens.
- 4. Type a comment describing your changes (for your revision history) and click Check in.

All the files in your folder are now checked in.



### **TIP**

You can also click the **Check In** icon (above) with a folder selected to check in all files in your selected folder. Comments you type for your revision changes apply to all files you check in at once.

To check in **some** files in a folder, use <Ctrl> + **click** to select multiple individual files and click **Check** In.

For any **processing errors** you see details like: **files opened in Designer**, **file check out discarded**, or **file deleted**.



#### NOTE

Your configuration determines who can see your checked-in files.

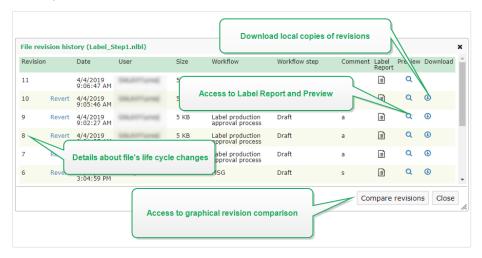
For example: with workflows enabled, your print operators see only **Approved/ Published** checked-in files.

### 3.3.5.6. File Revision History

Every change to the file is logged to database. Whenever you check-in the document, you can enter the comment describing the changes. The file revision history includes all events occurring for file, including revisions and workflow changes.

To see all activities for the file, do the following.

- Select the file.
- 2. Click the **Revision History** button in the Toolbar.
- The dialog box displays all known details, including revision number, data of change, user who committed the change, size of the file, workflow defined for current folder, workflow step for the file, and comment.



- 4. File Revision History provides access to additional commands:
  - Revert to label revision. You can revert files to any of their previous revisions. This
    action copies the selected file revision and adds it as the latest (current) revision.



#### NOTE

Reverting to label revision is reserved for access roles with Read/Write permissions for the current folder. See how to set access permissions for folders in section File Access Control.

- Label report. A label structure report will be displayed on-screen, including meta information about the label including the graphical preview, plus a list of all label objects and variables. The report can be also downloaded as XML file.
- Preview label revision. You can preview any revision of the label file on screen. Use this
  feature to avoid opening labels in the designer, just to see how it looks.
- Download. You can download local copies of all existing label revisions from Document Storage to your computer. Open the downloaded copies in Designer and use them to create new revisions.

• **Compare revisions.** You can graphically compare the changes from one document revision to another on-screen.

### 3.3.5.7. Working with Revisions

The revision control system ensures transparency when reviewing your labels, solutions, or other labeling assets in the document storage. After each document check-in, your Control Center stores information about workflow promotions, check-ins, changes, and user comments. Additionally, Control Center keeps track of who and when performed all the actions.

When checking in your files, you can choose between minor and major file versions. Although there are no strict rules about when to use minor or major revisions, these are the guidelines:

- **Minor revisions** mark smaller user edits while working on a draft or when applying interim corrections.
  - If you check out your document, make changes, and check the document back in without promoting it to the next workflow step, Control Center creates a new minor version by default.
- **Major revisions** mark significant changes in the documents. These are the changes that a label or solution designer would do before forwarding the document to the approvers. Typically, new major revisions correspond with workflow step promotions.
  - The administrator can choose which workflow step marks a change in your documents as a new major revision.

# 3.3.5.8. Requesting Label Revisions

The label files stored inside the Document Storage are accessible using the WebDAV protocol. To get access to the label file, the application requiring a label authenticates itself, with the user account the application is running under. Each application runs in a specific user-space. For example, if you run the application interactively in your desktop, it will inherit privileges of your user account.

When the application requests the file, the exact obtained revision depends on the privileges of the user account.

### **Requesting HEAD Revision (Latest Available)**

If you request a file without specifying any revision (you provide the file name alone), the following will happen:

- If you have read/write access to the file (you are a designer), you will get the last revision.
- If you have read-only access to the file (you are user from a production environment), you will get:
  - The last revision (if the folder doesn't have any workflow enabled)
  - The last approved-published revision (if the folder is governed by some workflow process)

### **Requesting Specific Revision**

To request a specific revision, provide it as a parameter after the file name.

To request revision 10 of file label.nlbl, you would request it as:

```
label.nlbl?v=10
```

The access permissions defined on the folder where the file resides determine if you can access the file or not. If you are not allowed to get that revision, the failure will be reported in the error message.

### **Requesting the Last Published Revision**

To request a specific revision, provide it as a parameter after the file name.

To request the last published revision of file label.nlbl, you would request it as:

label.nlbl?v=P

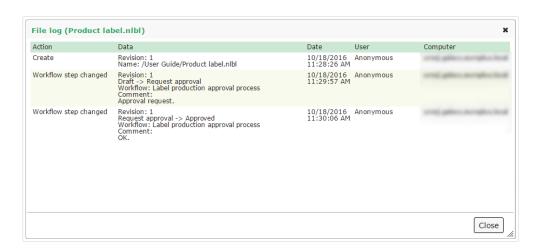
If no file revision has been approved, the failure will be reported in the error message.

#### File Log

The file log contains the information about file changes and check in / check out actions. This is a subset of information available in the file revision history.

To see the file log, do the following:

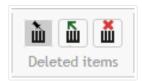
- 1. Select the file.
- Click **Get info** button in the Toolbar.
   You can also right-click the file and select **Get info** in the context menu.
- 3. Click View file log.



# 3.3.5.9. Restoring Deleted Files

The Document Storage contains a Recycle Bin functionality. When you delete a file, it is not actually deleted from the system, but is just marked as deleted. When you want to really remove the file, you have to purge it.

To show the deleted files, to restore them or to purge them from the system use the icons in **Deleted Items** group in the toolbar.





#### **NOTE**

To see the **Deleted Items** group in the toolbar, you have to enable versioning for the document storage and must be member of Administration access role.

### 3.3.6. Workflows

Control Center allows you to enable workflows along with your revision control system (versioning). Workflows let you set additional quality controls in your label printing process. Workflows include sequences of connected steps that follow workflow logic. Every workflow has at least a starting step and final step. There might be one or more possible promotion steps from the current step.

Using workflows, you can track the status of your label files.

When you include folders in your workflow process, the revisions users see when they request label files depend on their access role privileges. For more information, read File Access Control.



### **NOTE**

The functions described in this section are available in **NiceLabel LMS Enterprise**.

# 3.3.6.1. Approval Process

Approval steps depend on the type of workflows you use. For each default workflow, NiceLabel sets the hierarchy of workflow steps and which steps are permitted next.

Files you upload to Document Storage in workflow-enabled folders start on the **Draft** step. When authors complete their initial layout and label contents, they move the file to the next step: **Request approval**. When configured, Approvers receive email notifications for files they're assigned to review and approve. Approvers can **Reject** files (this notifies Authors to make changes) or approve them. Approval moves the files to the **Approved** step. Each workflow defines available steps and the transitions from one step to another.

Moving files to the Approved step can require users to provide login credentials again. Reauthenticating this way confirms the correct users are still logged in. The Two-step label production approval process includes this re-authentication by default.

The **Approved** step (or **Published** step in some workflows) is the final state for files. You cannot use labels in production until they are approved and published. **Operator** role members (or any users with print-only permissions) can only see files on the **Approved/Published** step. Authors can work on new revisions of label files, but these changes are not visible to print-only users until their revisions reach the **Approved** state.



### NOTE

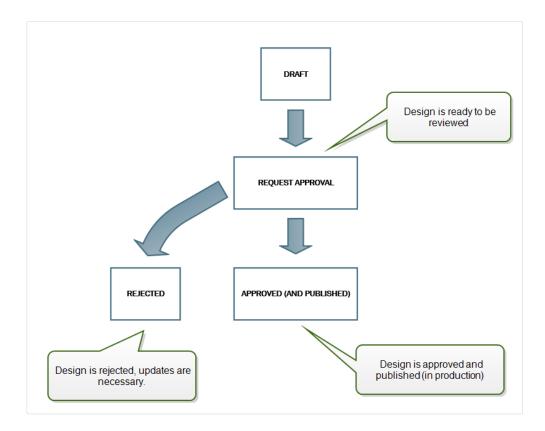
Files only become visible to **Operator** access role members (print operators and print-only users) when they are approved/published.

### 3.3.6.2. Label Production Approval Process

This workflow uses standard approval processes. Documents start as drafts. When ready, authors request approval. Approvers either approve the documents or reject them. If rejected, authors can make additional changes and request approval again. When approved, documents are published automatically.

Operators can only see published documents. Operators have print-only permissions and can only use the latest approved (and published) documents. If un-approved revisions exist in Document Storage, they remain invisible to print operators.

The system documents each workflow step change. When users change steps, they must enter mandatory comments.



### 3.3.6.3. Two-step Label Production Approval Process

This workflow is similar to the **Label production approval process** workflow with a single difference. This workflow enables the two-level approval process. Before the document is approved (and published), two independent approvers must review and approve the document. Only after the document has surpassed both approving steps, it becomes published.



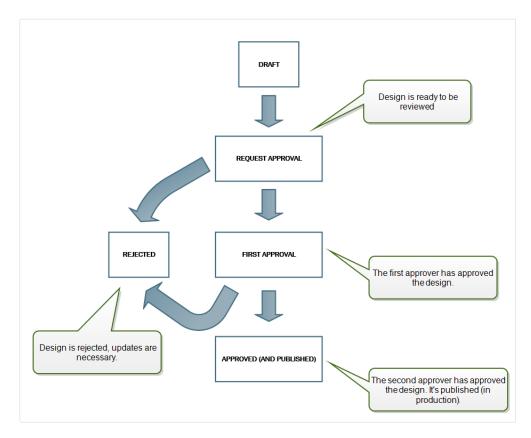
### **NOTE**

Independent approvers must be logged in Control Center as unique users.

This process can be configured to have two separate approvers (or two groups of multiple approvers) defined for each step of the approval process.

- Request first approval: assigns unique users for the "step one" approval.
- Request final approval: assigns unique users for the "step two" approval.

To reach the approved status, the document must be approved by a unique member of both groups.



# 3.3.6.4. Label Production Approval Process with Delayed Publishing

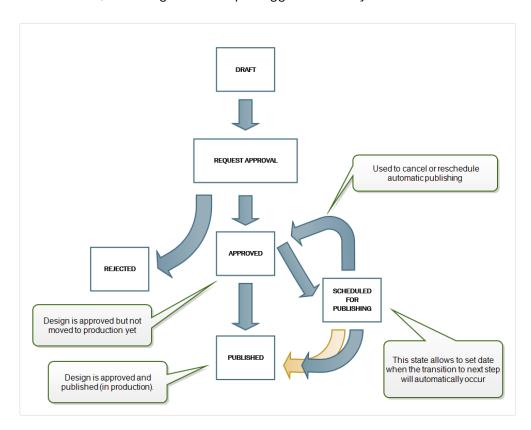
This workflow is similar to the **Label production approval process** workflow with one difference. This workflow differentiates between the **Approved** and **Published** states. When the document is

approved, it is functionally complete, but not automatically used by the print operators yet. In some environments the move into the final Published state must be performed with a delay. The document might have to wait until the next work shift, or until specific date, such as after the public holidays, or when a production order requires new label designs. You can schedule the future date and time for the publishing to occur.

The transition to the Published state can be done manually, or automatically by the system. The state Approved is not a final state, but is followed by:

- Published. In this case the transition into the Published state is completed by the user.
- **Scheduled for publishing.** In this case, the transition into the Published state is completed by the system on a date and time as defined in the workflow.

In both cases, the change of the step is logged into the system database.

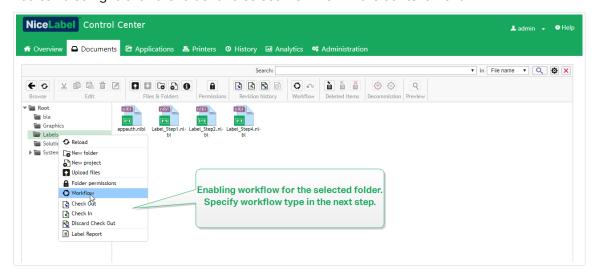


# 3.3.6.5. Enabling Workflows

To enable workflows, do the following:

- Open the Administration tab and click the Versioning and Workflow panel. The Document Storage Versioning and Workflows page opens.
- 2. Set Workflows for document storage to Enabled. Now, the workflows are active.
- 3. Open the **Document Storage** tab.
- 4. Select the folder for which you would like to enable workflow control.

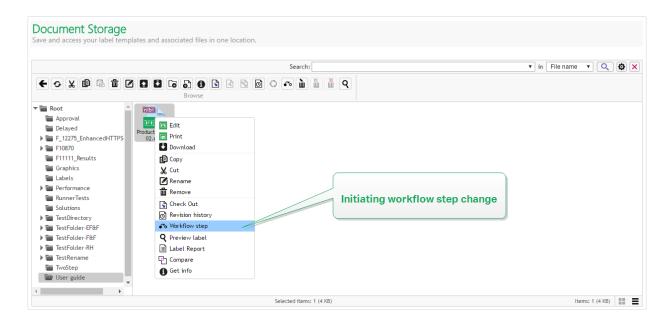
Click the Workflow button in the Toolbar: You can also right-click the folder and select Workflow in the context menu.



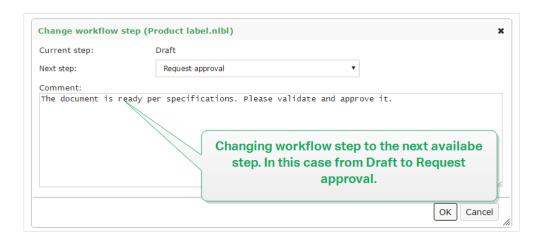
- 6. Select the option you want to enable for the folder.
  - Use workflow from parent folder. Select this option if the parent folder has defined the same workflow that you intend to use. The workflow logic is inherited from the parent folder. When you change the workflow on the parent folder, the change will propagate to the current folder as well.
  - No workflow. Select this option if you want to disable workflow control for the current folder.
  - **Choose workflow.** Select this option to define workflow for the current folder. You can select the built-in workflows or a custom workflow if there is one.

# 3.3.6.6. Assigning workflow steps to files

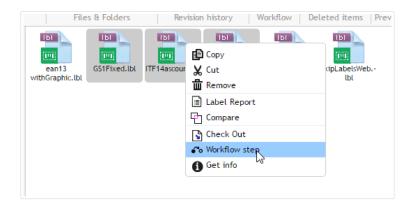
Each file in the workflow-controlled folder is on a certain step. The workflow step identifies in which workflow stage the file is currently in.



When you upload a new file, or enable a workflow for the existing folder, the file is on the initial step of the workflow. In case of built-in workflows, such as **Label production workflow** and **Two step approval**, the initial step is **Draft**. Each time you change the workflow step for the selected file, the new step is automatically assigned to the document. You can only change the steps as defined by the workflow rules.



Control Center allows you to simultaneously change the workflow step for multiple files in a folder. Use **<Ctrl> + click** to select the files and **right-click** to open the context menu. Select **Workflow step** option to promote the files to the next available workflow step.



There are two conditions that you must meet to promote multiple files to the next workflow step:

- All selected files must be on the same workflow step.
- None of the files must be checked out during the promotion.

Once the document reaches the **Approved** step, it becomes visible to print-only users. These users are usually members of the built-in access role **Operator**, but you can also create your own roles.

Print-only users may in certain cases be also allowed to print working versions of files. Go to **Administration > Web Clients > Edit client** to set this property.

Such use is intended for solution development and testing.

# 3.3.6.7. Delayed Approved File Publishing (Scheduled Publishing)

To enable delayed publishing of the approved file, do the following:

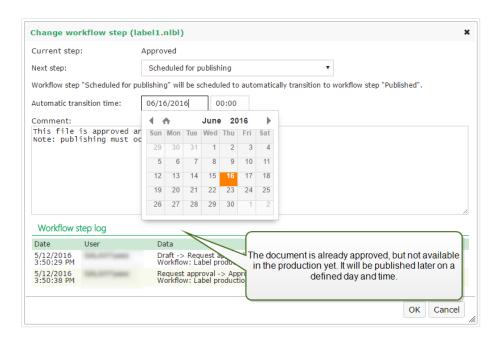
- Make sure the folder which contains the file is configured to use the workflow Label production approval process with delayed publishing.
- 2. Follow the workflow steps.
- 3. When the document is in the Approved step, it is ready, but not available yet (not published).



### NOTE

The step **Approved** is the final step of other workflow types, but not the workflow for delayed publishing. The final step here is **Published**.

- 4. Open the workflow step selection dialog.
- 5. Select **Scheduled for publishing** for the next step.
- 6. Select **the date and the time** when the transition from Approved to Published step must occur.



- Enter the comment.
- Click OK.

Control Center will monitor all scheduled actions, and perform the workflow step change automatically at the defined time.

## 3.3.6.8. Limiting Approving Privileges to the selected Folders

To change the workflow step from **Request approval** to **Approved**, **Rejected**, or any other defined step:

- The user must be a member of the **Approver** access role.
- The **Approver** access role must have read/write permissions for the document storage folder that contains the documents in approval. For details, read section File Access Control.



### **NOTE**

If there's a need to approve or reject documents without Approvers, members of the Administrator role can also approve or reject the documents. To see how to prevent the Administrators from approving the files, see section Preventing Administrator from Approving Files.

You might have a situation in which only one approver can work with the documents in a folder. Or you want to allow the approver to work with files in *Folder1*, but not with files in *Folder2*. By default, being a member of the Approver access role grants access to all folders. The solution is to disable file access to entire Approver role and then allow access case-by-case by adding users to other roles that have file access.

To limit the Approver access role to the particular folder, do the following:

- 1. Open Control Center in your browser.
- 2. Go to the Administration tab.
- 3. Click **Access Roles** in the left-hand pane.
- 4. Click +Add. The Create new access role window opens.
- 5. Type in a name of a new role, such as AccessFolder1.
- 6. Click Save.
- 7. Go to **Users in this role** and click **Add**.
- 8. Add the users who should have the approving privilege on the *Folder1*.
- 9. Click Save.
- 10. Expand the **Approver** role.
- Make sure the same user is also a member of this role.
   Now the user is member of both roles, AccessFolder1 and Approver.
- 12. Log in to **Control Center** as the administrator.
- 13. Click on **Document Storage** tab.
- 14. Right-click the Folder1 folder.
- 15. Select Permissions.



The **Permissions** option is only visible with enabled login.

 For the Approver role, change permission to None. For AccessFolder1 role, change permission to Read/Write.

Files in folder Folder1 can only be approved by this user and no other member of the Approver role.

# 3.3.6.9. Creating custom workflows

Control Center allows you to create custom new workflows. Use custom workflows to match the specifics of labeling process in your company.

Before you decide to create and use custom workflows, analyze your labeling process and the built-in Control Center workflows first. Consider these three available options:

- Introduce an entirely new workflow. In this case you are creating a new workflow from scratch. Although this is the most flexible option, make sure you know your approval process well enough before you start building a workflow. This saves your time and helps you eliminate potential future errors.
- Edit the built-in workflows. In this case, we recommend you to duplicate and customize the most appropriate built-in workflow. Because the steps in a duplicated workflow are already

configured, you must only make the necessary changes to adapt the workflow steps to your label approval process.

• Try to redesign and match your labeling process with the built-in workflows. This option makes sure your selected workflows are fully tested by NiceLabel and functional from start.

Before you start creating or editing the workflows, get familiar with the terms used in your workflow editor:

- **Steps**: Each workflow contains one or more phases called steps. During the approval process, your documents go through the predefined approval steps. You can create, name, and order your steps, then assign states to each step.
- **States**: States determine what you can do with a document during a workflow step. States include **Working**, **Locked**, and **Published** (see below for detailed description of states). Users assigned to custom workflow steps can only use the states you assign to your steps.
- **Transitions**: You control the workflow's direction with transitions. For example, when a reviewer rejects someone's changes, you can direct that document back to the submitter, or forward it to a different reviewer. All steps can transition forward or backward, except your initial step.
- Automatic transitions: Workflows can contain timed approvals that automatically transition
  your documents to different steps at times you choose. You can add a delay before publication,
  or prevent backlogs in documents under review by forwarding them to the next step after a set
  time.
- Recipients and users: You control who gets email notifications for each workflow step.
- **Enabled workflows**: You can toggle workflows on and off. All workflows require **Versioning** to be enabled.



### NOTE

To create customized workflows, you must have an Administration access role.

- 1. To create a new workflow, go to **Administration > Versioning and Workflows > Workflows**.
- If you are adding a new custom workflow, click +Add. The editing window for a new workflow opens.

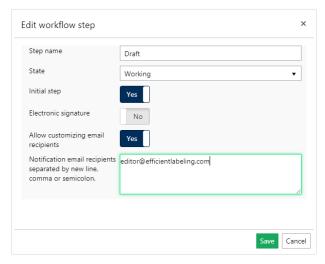
If you are adding a custom workflow based on one of the existing workflows, click **Duplicate**. The editing window for a duplicated workflow opens. Further configuration steps are the same as for a new workflow. The difference is that the steps are already configured.



### **NOTE**

You can identify the duplicated workflow by the name. If there's a single duplicate, the workflow's name is **WorkflowName - Copy**. If there are multiple duplicates, each of them is numbered, e.g. **WorkflowName - Copy (1)**.

- 3. Type a **Name** and **Description** for your new workflow. Make them as descriptive as possible to make the workflow easy to find later.
- 4. Add and configure your workflow steps. Click +Add in the Steps field to add new steps. To edit an existing workflow step, select the step and click Edit step. The Edit workflow step window opens:
  - Type the Step name.
  - Select the document **State** to be used in this step:
    - In Working state, reviewers can check in, check out, and change the document.
       Use this state for earlier approval steps when you expect multiple changes to the document, such as draft, first level approval, etc.
    - In Locked state, reviewers can only review the document the document is readonly. Use this state to keep documents unchanged on the current step, such as when issuing requests for approval.
    - In **Published** state, the document is visible to members of all access roles. Use this state for documents ready for use in production.



- Decide if your newly added step should be the Initial step of the workflow. If you select
  Yes, this step becomes the first step in your newly added workflow. You can only define
  one step as the initial step.
- **Electronic signature** is an additional security measure that prevents unauthorized users from making changes to workflow steps.
  - After you enable the **Electronic signature**, users authorized to promote the documents to the next workflow step must authenticate again using their Label Cloud credentials.



While authenticating again in the newly opened Label Cloud sign in window, your session remains open. After the successful authentication, continue promoting the document.



**Electronic signature** in your Label Cloud works only with Microsoft accounts.

 Set as major revision marks the promotion of your document to the selected workflow step as a major revision. If the document had a minor version in the preceding workflow step, the promotion turns the current (minor) revision number into a major revision.
 This options is not available if you enable the option Use only major revision numbers.
 Check its status on Administration > Versioning and Workflows. Read more in section Versioning and Workflows.

### **Example**

Document's revision number in the "Draft" step was 3.2. After promoting the document to the "Request for approval" step, its revision number goes to 4.0.



### NOTE

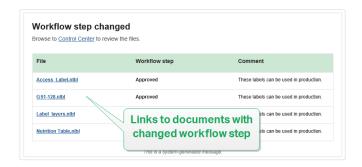
Each workflow sequence (from "Draft" to Approved") can set the major revision to your document only once. This means that if the document's revision number already is a major revision, e.g. 4.0, the revision number remains 4.0. The revision number does not go to 5.0 after promoting your document to the next workflow step.

- For each workflow step, you can define which users receive notification emails after a
  document reaches the current step. You can make the selection of users fixed or
  customizable. While you are changing the workflow step for a file in the Document
  Storage, the Allow customizing email recipients option allows you to add or remove
  the notification email recipients.
- Notification email recipients is where you add the email addresses of the users who
  are informed about the change in the workflow. Each time a document reaches the
  workflow step, the listed users receives an email with the link to the document.

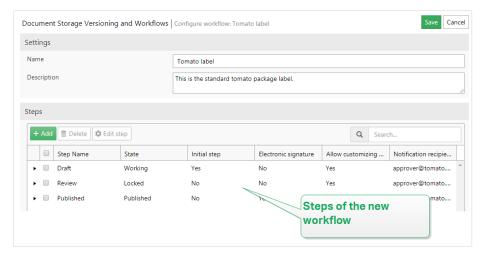


### NOTE

If you change the workflow step for multiple documents at once, the listed recipients receive a single notification email. The mail includes links to all relevant documents.



Repeat the configuration for all of your planned workflow steps. Click **Save** when your are done configuring the workflow. The new steps are listed under the **Steps** of your new workflow.



- 5. After defining the steps for your workflow, you must also define how you are going to promote the documents to the next workflow step. Transition allows you to define the promoting options for your documents approvals, rejections, and time delays before publishing.
  - Click +Add to define the transition to the next step in the workflow. This is the step that
    the document transitions to after the authorized users give their approval. The Edit
    workflow step transition window opens.
    - Next step defines the transition options that follow the current step. You can select among the existing workflow steps.

### **Example**

When you have a **Review** step that decides if a **Draft** label should be published or rejected, add two "next steps" - **Published** and **Rejected**.

The assigned reviewer selects **Publish** to make it printable, or **Reject** to send the label to the Rejected step. If rejected, the author can now make corrections on the rejected document, and promote it to the **Draft** step.



Automatic transition promotes the document to the next workflow step without
manual intervention of authorized users after a specified time period. Use this
option if you want implement time delay on your workflow step.

### **Example**

Your label has reached the Approved step, but you want to make it available for printing after a period of time. Add a Publishing delay step as the next step, and enable automatic transition for this step. When authorized users promote the label to the Publishing delay step, they define the time period after which the label becomes published - in this case on September 26th, 2018 at 6 AM.

#### Examples:

**Time limits**. You may set a time limit for reviews by automatically transitioning documents to the next step.

**Publishing delays**. Your label has reached the **Approved** step, but you want to make it available for printing after a period of time.

Add a **Publishing delay** step as the next step, and enable **Automatic** transition for this step. When authorized users promote the label to the **Publishing delay** step, they define the time period after which the label becomes published.



If you want to make sure the authorized users who promote the document through
the workflow step cannot also approve the next step transition, enable the **Unique**user option. With this option enabled, the user who reviews the document must be

logged on to the Control Center using an account that differs from the account of the user who is assigned to the preceding workflow step.

- Authorized roles allow you to select the access roles whose members can
  promote the documents to the next step. The members of other roles are excluded
  from this step.
- 6. After you define a custom workflow, you can apply this workflow in your Document Storage the same way you apply the built-in workflows. See section Enabling Workflows for details.
- To delete a workflow, select a workflow from the list and click **Delete**. If you want to delete a
  workflow, make sure that none of the files in your Document Storage use the workflow or any
  of its steps.

If you are experiencing difficulties while deleting the workflow, try deleting the individual steps first. When deleting the used workflow step, a warning displays the names of the files that use the workflow step you are trying to delete.



#### NOTE

You cannot delete the built-in workflows.

### 3.3.7. Browser Extension

To enable the best experience using the Document Storage, make sure you install the extension for your browser, when prompted so. The extension will more tightly integrate Document Storage with the NiceLabel client. The browser extension will run NiceLabel client as RemoteApp program from the server seamlessly and without any prompts.

### **Example**

Double clicking the label file will open it directly in the label designer and not download the file. Saving the label in designer will save it back to the Document Storage.



# 3.4. Applications

# 3.4.1. Web Applications

Use Control Center **Web Applications** tab to share labels and solutions from the **Document Storage** with your remote co-workers or external users via the web. Web applications are useful each time you wish to keep control over the shared labels or solutions. Sharing of centrally managed labels or solutions makes sure that:

- Remote users always get the latest versions of approved labels and solutions.
- · You can enforce user login policy.
- · You keep track of printing.
- You do not run out of printer seats.



### **NOTE**

Notes for users of previous Control Center versions: With the 2019 release of Control Center, Web Applications have replaced Web Clients. With previous versions, you created Web Clients for each shared label or solution file, and defined user names and passwords to make these Web Clients accessible. With Control Center 2019, you create a Web Application, define the shared label or solution file, and assign the Web Application to a single user or to a range of users. This makes label or solution sharing easier, faster and scalable. During the upgrade, Control Center 2019 creates a Web Application for each existing Web Client. User that you created for legacy Web Applications automatically convert to authorized users of Web Applications.

### This section explains how to:

- Create new web applications.
- Share your web applications.
- · Configure your web applications.
- Restrict application logins and printers.
- · Record printing actions.
- Configure specific settings for users or groups.
- Access and use the shared web applications.
- Use file database connections in your web applications.

## 3.4.1.1. Creating Web Applications

To create a new web application and make the application ready for sharing:

- 1. Go to the Control Center **Web Applications** tab, and click **Add+**.
- 2. Type a **Name** for your web application. Give your shared web application a meaningful name to make it easy to find.

### **Example**

Nice Label Sample

3. Type a **Description**. Explain the purpose of your web application.

### **Example**

Sample of a GS1-128 compliant label.

- 4. Select your web application type. You can choose to open single label or solution files or folders containing multiple files in Documents. When you choose to open folders, you do not need to create Web Applications for each file in the folder, you can add or remove labels you want to print from your folder.
- 5. For **Path**, browse **Documents** in your Control Center and select the path of the solution, label file, or folder for sharing.

You can also type the file path directly. File path must begin with "/" character.

### **Example**

/Labels/Test.nlbl

If the label or solution file in your application uses a file database connection (with Microsoft Excel or Access database), read section Using File Database Connections in your Web Applications to ensure the accessibility of your data.

6. Click Save.

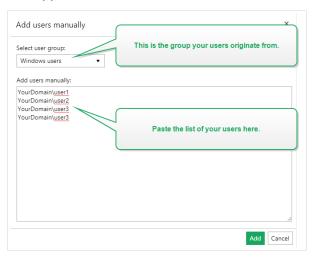
Your new web application is now stored on the Web Application page and ready for sharing.

You can later remove the added web applications. Select them from the **Web Applications** list and click **Delete**.

# 3.4.1.2. Sharing Web Applications

Once you have created a web application, you can start sharing it:

- If you are sharing newly created web applications, go to the Authorized Users and Groups group and click +Add Users. The Add Users window opens. If you want to add or remove users for existing web applications, select an application from the Web Applications panel.
- 2. Share the web application with existing users or groups. Use the **Search users** field to type your selection. You can also narrow your search using the drop-down list, or invite new guest users.
  - If your company uses the Azure Active Directory, you can either select specific
     Organizational users or Organizational groups. To open the shared web application, all included users must authenticate themselves using their work account credentials.
  - In certain cases you want to assign your web application to a list of users. To speed up
    the process of adding multiple users, list these users in a table and manually add them
    to your shared web application:
    - 1. Click the **Add users manually** link. This opens a new window.
    - 2. Select the user group from which your list of user originates.
    - 3. Paste or type your users in the **Add users manually** list. List the users in separate lines.
    - 4. Click **Add**. All your manually added users are now authorized users for the shared web application.



Click Invite new guest user to share your web application with individual users or with
users that are not listed under your company's Organizational users or groups. Type the
Invitation email address, and your message. Click OK. The new guest user receives the
invitation email for the shared application.

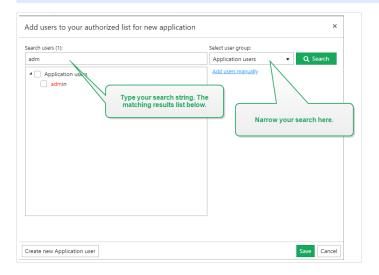


### NOTE

The invited guest users must click the link in the received invitation email. The link takes the invited users to the Label Cloud sign up page. After they complete the sign up procedure, they can start using the shared web application.



NOTE: The **Search users** field supports incremental search. After you select the type of users and groups, each entered character results in suggestions to choose from.





### **NOTE**

If you try to share your application with more than 20 users or groups, Control Center displays a warning when you click **Save**. The purpose of this warning is to prevent accidental sharing of applications with unwanted users or groups.

The added users or groups are now listed among the **Authorized Users and Groups**. After you save changes on the Web Applications page, the added users or groups receive an email with a link to your shared web application.

To restrict access to the shared web applications, you can later remove the added users or groups from the **Authorized Users and Groups**. Select them from the list and click **Remove**.

# 3.4.1.3. Configuring Web Applications

When preparing your web application for sharing, use the User Settings options:

- **Status** activates or deactivates the shared web application. Web applications are **Active** by default. This means that users can start working with them immediately. If you want to prevent the usage of your web application, set status to **Inactive**. This can be useful during the testing phase or if you wish to postpone the use of your web application.
- Use Variable values to predefine values for certain variables that belong to the shared label or solution.

For example, users from two different offices open the same solution file simultaneously. Main office users have solution in French language, while branch office users have their solution in German language.

All users experience the same look and feel of the web application, while each user must have application in their own language. In this case, you would define the same solution for users in both offices and define the starting value of the *language* variable. You would use this variable as a filter in the database table, displaying strings in the right language. Usually, the criteria is a simple relation, such as *field name = variable value*.

### **Example**

To set variable *language* to starting value French, use the following syntax: "language" = "French"

If a variable name includes space, also include it as a part of variable name in double quotes.



#### NOTE

Check for typing errors in variable names and values. Also make sure to test the web application before you allow the user to log in. After the solution opens, it displays no errors if you assign values to non-existing variables.

Enable use of non-published files in Document Storage allows you to permit the web
application users to work with versions of labels and solutions that are not published (approved).
By default, web applications only share labels and solutions that complete all workflow steps
and are marked as approved. Sharing of non-published files can be useful as part of various
testing scenarios.

# 3.4.1.4. Restricting Application Logins and Printers

Web Printing gives you application access control and allows you to limit the number of used printers for your shared application.

• IP address restriction allows you to limit the web application logins only to computers with selected IP addresses. Type IPs into the field to allow the users to log in. The shared web application blocks computers with non-defined IP addresses.



#### NOTE

You can define multiple IPs. Either type every address in a new line, or use semicolons (;) separate multiple IP addresses. To define ranges of permitted IPs, use CIDR notation. You can convert subnet mask notation into CIDR notation using online calculators.

### **Example**

To allow login from any IP in range 192.168.0.1–192.168.0.254, define the range as 192.168.0.0/24.

- **Enable printer limitation** to limit the number of printers that the users of this web application can print to.
- **Number of printers** is the maximum number of allowed printers per user for this web application. If users exceed this number, they can no longer print to additional printers.



Each used printer in the shared web application takes one license seat. This setting makes sure you don't accidentally run out of available printer seats that come with your NiceLabel LMS license.

## 3.4.1.5. Recording of Printing Actions

**Record printing activities to history log** keeps track of user printing actions within the shared web application. This option allows you to start or stop the recording of printing actions in Control Center.

See the recorded activities on the Control Center History page.



#### NOTE

Recorded information items are: label name, label quantity, printer name, variable values, etc.

# 3.4.1.6. Configuring Specific Settings for Users or Groups

You can configure web application settings per single added user or group. These settings are valid only for the specific user/group and have no impact on the general configuration of web application.

To enable and configure specific user settings, select a user or group from the list of **Authorized Users and Groups** and click **User Settings**. The **User Settings** window appears.



### NOTE

These settings override the general settings that you configure for the application.

- **User settings** toggle button allows you to enable specific per-user or per-group configuration settings.
- **Enable printer limitation** allows you to limit the number of printers that the user or group can print to.
- **Number of printers** is the maximum number of allowed printers per single user or group. If the user or group exceed this number, they can no longer print to additional printers.



Each used printer in the shared web application takes one license seat. This setting makes sure you don't accidentally run out of available printer seats that come with your NiceLabel LMS license.

 Variable values predefine values for certain variables that belong to the shared label or solution. Values defined in this field (for specific users or groups) override the general values that you define for the web application.

### 3.4.1.7. Accessing and Using the Shared Web Applications

After you create and share the web applications, the authorized users must complete these steps before they can start working with their assigned applications:

1. Open your browser and type this address:

http://myaccount.onnicelabel.com/print

- ... where myaccount is the name of your Label Cloud.
- 2. You land on the **Web printing** page. If you have never installed any web applications, click the link to download and install the Web Client.



### NOTE

The Web Client installation is only required the first time you use the shared web applications.

- 3. Login window opens. Type the user name and password that the Control Center administrator assigns to you.
- 4. The sign in window pops up automatically. Sign in using your Microsoft or Google account.



### NOTE

To keep you logged in, enable the **Remember me** option in the Label Cloud sign in window. The Web Client will not prompt you to sign in the next time you open your web application.



### **NOTE**

If you lose the Internet connection, you can still open your shared web application for up to 5 days after you open the application while being online.

5. If you are authorized to use more then one web application, the **Web Applications** selection window asks you which application do you want to run. Select the preferred application and click **Run web application**.



- Your application opens in NiceLabel Web Client.
- 6. When you close the window, Web Client signs you out from the shared web application by default unless you select the **Remember me** option (see step 3).
  If you selected the **Remember me** option while signing in, the web application window displays your user name in the title bar. If there are other users that work with shared web applications on your computer, you can set the web client to forget your credentials. Click
  - displays your user name in the title bar. If there are other users that work with shared web applications on your computer, you can set the web client to forget your credentials. Click **Sign out** in the window title bar and the next user must sign in using their own Label Cloud account credentials.

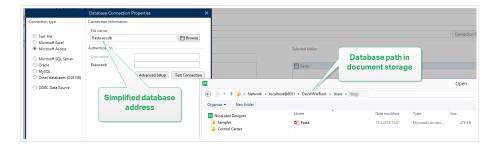


# **3.4.1.8. Using File Database Connections in your Web Applications**

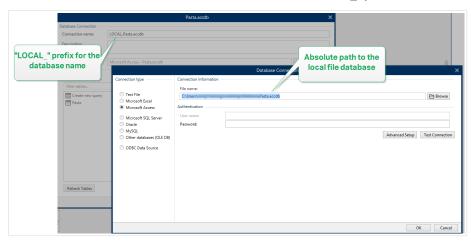
In many cases, the labels or solutions in your shared web applications are connected to a database. The connected database works as a dynamic data source for the object on your labels.

There are multiple locations where you can store your database. To ensure your file database (Microsoft Access or Excel) is accessible from the shared web application, follow these rules:

Your database is stored in the document storage of your Control Center. In this case, we
advise you to store your label file in the same folder as the database. When designing the label
in NiceLabel 2019, browse for the database and connect. NiceLabel 2019 automatically
simplifies the database URL in the database connection dialog.



- The database is stored locally on the server that runs the Web Printing site. In this case, define the database connection in NiceLabel 2019 as a file path on the server where the database is stored.
- 3. The database is stored locally on the computer that runs the web application. NiceLabel Web client can use your local database that has no access to the Web Printing server. To enable this, the local database name must start with the "LOCAL\_" prefix.



# 3.4.2. Cloud Integrations

Cloud integrations let third-party developers (integrators) use our Cloud Print APIs and Cloud trigger APIs to interact with your label printing system. To integrate third-party developers so they can use our APIs:

- Third-party developers must register on our Developer Portal.
- You must subscribe your third-party developers in NiceLabelControl Center.

To use Cloud trigger APIs, Label Cloud APIs, and Cloud Print APIs, third-party developers must include subscription keys from our Developer Portal in HTTP requests with custom "Ocp-Apim-Subscription-Key" headers.

Go to **Control Center > Applications > Cloud Integrations** to see your active and inactive cloud integrations.



These instructions do not apply to on-premise NiceLabel editions.

### 3.4.2.1. Setting up Developer Portal accounts

### In Control Center:

- 1. Open Control Center in your browser.
- 2. Go to Applications > Cloud Integrations.
- 3. Click +Add. The Integrators page opens.
- 4. Type the Name of your third-party developer.
- 5. Click Save.

Control Center lists your new developer on the **Cloud Integrations** page with the status: **No developer subscribed**.



### NOTE

Your Control Center user account must have **manage cloud integrations** permissions.

# Instructions for your third-party Developers:

- 1. Open the Developer Portal in your browser.
- 2. Click Sign up. The Registration page opens.
- 3. Enter your information and click **Sign up**.
- 4. Go to your email inbox and open the email the Developer Portal sends you (check your Junk folder).
- 5. Click the confirmation link in the email. Your **Developer Portal** profile page opens.

Your integrator is registered on the **Developer Portal**. To use APIs, subscribe to **Cloud Print APIs** and connect subscriptions to Control Center, read the following sections.



#### NOTE

For more information, read the Cloud Triggers section of your Control Center user guide.

### 3.4.2.2. Subscribing on NiceLabel Developer Portal

After your third party integrators set up **Developer Portal** accounts, they must subscribe to specific products to use their APIs, and then connect their subscription to Control Center. Subscriptions to **Developer Portal** products are free and use primary and secondary keys for authentication. For example, to use Label Cloud APIs, they must subscribe to the Label Cloud product on the **Developer Portal**:

- 1. Sign in to NiceLabel Developer Portal.
- 2. Go to Products > Label Cloud.
- 3. Click Add subscription.
- 4. Type your **subscription name** (if you have multiple customers, choose customer-specific names).
- Click Confirm.

Your developer's profile page opens with the dialogue: You have successfully subscribed to the Label Cloud product. Try the APIs in this product now. Your developer is subscribed in the **Developer Portal**, but you must connect their subscription to Control Center before your developer can use **Cloud Print API**.



### **NOTE**

Subscribing generates two separate keys. Use them for multiple program versions and added security. If your primary key becomes compromised, use your secondary key and regenerate your primary key. For more information, read the Cloud Triggers section of your Control Center user guide.

# 3.4.2.3. Connecting your Developer Portal subscription to Label Cloud

After your developers register and create subscriptions on **Developer Portal**, you must connect their subscriptions to Control Center before they can use our APIs in your programs.

- 1. Go to Control Center > Applications > Cloud Integrations.
- 2. Find the integrator connected to your **Developer Portal** subscription, and click **Copy the key**. Send this key to your third party developer.

Instructions for your third party developer:

- 1. Sign in to NiceLabel Developer Portal.
- 2. Go to Products > Label Cloud.
- 3. Click Developer Sign Up API v1.

- 4. Click Try it.
- 5. Type or paste your key from Control Center in the **IntegratorKey** box.
- 6. Under **Authorization**, select your primary or secondary subscription key (use primary by default). For multiple customers, make sure you select your correct subscription.
- 7. Click Send.

When your developer clicks **Send**, return to **Control Center > Applications > Cloud Integrations** and refresh your browser tab. Control Center lists your developer as subscribed.

Your third party developer is connected and ready to use our APIs.



### **NOTE**

Your subscription keys work for multiple developers. For transparency and security, we recommend you create separate Cloud integrations for each developer. With this method, you can revoke access from single developers by deleting their individual Cloud integrations without affecting access for your other developers.

To learn more about deploying cloud triggers, read NiceLabel Automation User Guide: Cloud triggers.

To learn more about Cloud Print, read Understanding Cloud Print.

To learn more about Cloud Print API, read Understanding Cloud Print API.

# 3.4.3. Automation Manager

# 3.4.3.1. Understanding Automation Manager in Control Center

Large organizations often have multiple Automation servers running different Automation configurations. When production problems occur, viewing Automation logs on multiple Automation servers is inconvenient, takes time, requires remote access, and increases security risks.

**Automation Manager** in Control Center provides you centralized access to all configurations and triggers running on Automation Servers on your local computers. Automation Manager in Control Center connects to Automation Manager on your local computers, so you can make changes on local computers instantly from your cloud or on-premise Control Center.

Automation Manager in Control Center works like your local Automation Manager, but adds computer names so you can quickly locate your Automation configurations and triggers.



Run Automation Manager on local computers when possible. Automation Manager in Control Center works best when you manage many Automation instances. With slow networks, your changes may take more time to affect Automation servers installed locally.

### In Control Center, you can:

- · Access all your triggers and see live trigger statuses.
- Start and stop your triggers.
- · Load triggers from different configurations from your **Documents** in Control Center.
- Access all trigger logs to see execution details.
- See triggers with errors or warnings, and get notifications when errors occur (In Administration
   Alerts).
- Add triggers from **Documents** to your local computers.
- Manage users and permissions for adding, editing, viewing, and deleting triggers (In User Management > Access Roles).

You can centrally manage all your triggers and configurations on all your computers with Automation Manager in Control Center.

# 3.4.3.2. Setting trigger management permissions

You can set Automation configuration and trigger management permissions for your Automation users in Control Center. Users with permissions can manage configurations and triggers on local computers from Automation Manager in Control Center.

With permissions set, your users can:

- Start and stop triggers.
- Add configurations.
- Reload and remove configurations.

To enable permissions for users in Control Center:

- 1. Go to User Management > Access Roles.
- 2. Click the role you want to change.
- 3. In Permissions for this Role click APPLICATIONS.
- 4. Enable Start/Stop triggers, add/remove and reload configurations (Automation Manager, Control Center).

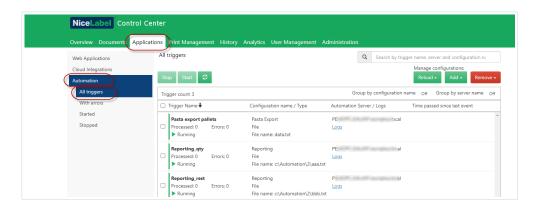
Users have now permissions to manage all triggers listed in Control Center.

### 3.4.3.3. Accessing all triggers

**Automation Manager** in Control Center provides you centralized access to all configurations and triggers running on Automation Servers on your local computers. Automation Manager in Control Center connects to Automation Manager on your local computers, so you can make changes on local computers instantly from your cloud or on-premise Control Center.

The **All triggers** page in Control Center is your entry point for monitoring and managing all your Automation configurations and triggers.

In Control Center, go to Applications > Automation > All triggers.



#### You can:

- · Access all your triggers and configurations.
- See which triggers are located on which computers and view Automation logs.
- See time elapsed since the last trigger event.
- · See triggers with errors.
- Check trigger statuses:
  - Running
  - Stopped
  - Server Offline
- · See configuration names and types.
- Manage all your triggers and configurations:
  - · Start and stop your triggers.
  - · Refresh your trigger list in Control Center.
  - · Reload your triggers.

- · Remove your triggers.
- Copy configurations from Documents in Control Center to Automation Managers on local computers in your network.
- · Sort your trigger list.
- · Search your triggers.
- Group your trigger lists by configuration names.
   Group your trigger lists list by server names.

Centralized management of all your Automation triggers saves you time, avoids system downtime, and minimizes security risks.

# 3.4.3.4. Starting and stopping triggers

**Automation Manager** in Control Center provides you centralized access to all configurations and triggers running on Automation Servers on your local computers. Automation Manager in Control Center connects to Automation Manager on your local computers, so you can make changes on local computers instantly from your cloud or on-premise Control Center.

You can start and stop triggers running on local computers connected to Automation Manager in Control Center.



### NOTE

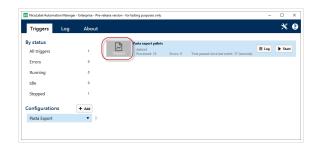
You can search for triggers by name, computer/server name, or configuration name.

# Starting triggers

To start triggers in Control Center:

- 1. Go to Applications > Automation > All triggers.
- 2. Check the boxes of triggers you want to start.
- 3. Click Start.

Your triggers start on your computers. Automation Manager changes your trigger icons from grey to green to show your triggers are running.



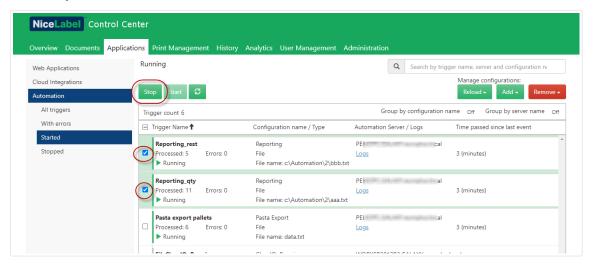


Stopped triggers vs Running triggers

## Stopping triggers

To stop triggers in Control Center:

- Go to Applications > Automation > All triggers.
- 2. Check the boxes of triggers you want to stop.
- 3. Click Stop.



Your triggers stop on your local computers.

# 3.4.3.5. Adding, reloading, and removing configurations

**Automation Manager** in Control Center provides you centralized access to all configurations and triggers running on Automation Servers on your local computers. Automation Manager in Control Center connects to Automation Manager on your local computers, so you can make changes on local computers instantly from your cloud or on-premise Control Center.

From Automation Manager in Control Center, you can add, reload, and remove configurations to and from Automation servers on local computers,

### Adding configurations

You can load Automation configurations from Documents to Automation servers on local computers. Running configurations on local computers helps you decentralize your automated printing processes and allows your users to manage Automation configurations.

Users can start, stop, and modify locally-stored Automation triggers.

You can also manage all configurations from Control Center.

To add configurations to local computers:

- 1. Go to Control Center > Applications > Automation.
- Click Add and select the computer to use for your Automation configuration.



### **NOTE**

You must store your Automation configurations in Document Storage.

3. The **Document Storage** explorer window opens. Find your configuration and click **Select**.

Your configuration is now deployed to the Automation server on your local computer.

## Reloading configurations



### **IMPORTANT**

When your users change and save configurations in Automation Builder, you must reload the configurations for them to take effect.

Reloading configurations in Control Center works the same as reloading configurations in Automation Manager on local computers. For detailed instructions, read your Automation User Guide.

To reload configurations in Control Center:

- 1. Go to Applications > Automation.
- 2. Click **Reload** and select your configuration from the drop-down menu.

Your configuration reloads. Your new configuration settings now affect your printing.

# Removing configurations

Remove configurations from your list in Control Center to prevent running obsolete triggers by mistake.

To remove configurations in Control Center:

- Go to Applications > Automation.
- 2. Click **Remove**. Select your configuration from the drop-down menu.



Removing configuration from your list in Control Center does not delete configuration files from your local computers or Document Storage.

Your configuration is removed from your list. Triggers from removed configurations are no longer listed.

### 3.4.3.6. Checking and filtering Automation logs

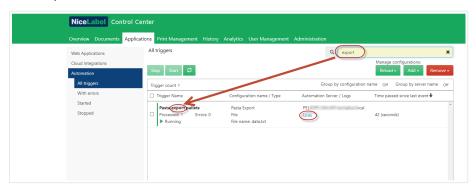
**Automation Manager** in Control Center provides you centralized access to all configurations and triggers running on Automation Servers on your local computers. Automation Manager in Control Center connects to Automation Manager on your local computers, so you can make changes on local computers instantly from your cloud or on-premise Control Center.

You can check and filter Automation logs for triggers running in Automation Managers on local computers connected to Control Center. Automation logs all activities to a local database so you can view history and troubleshoot trigger executions.

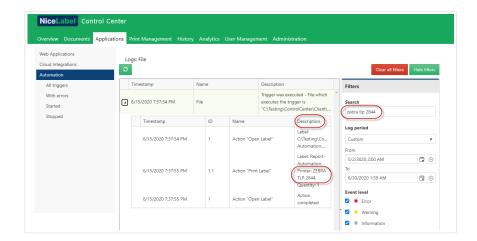
Your **Logs** pane displays information for all events related to filters you apply.

To check and filter triggers in Control Center:

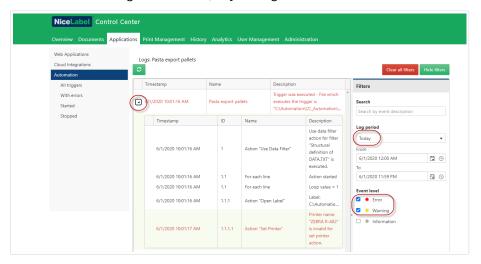
- 1. Go to Applications > Automation > All triggers.
- 2. Search for your trigger in your trigger list and click **Logs** (in the **Automation Server / Logs** column).



- 3. Your logs window opens. You can filter your logs by:
  - · Time periods (predefined or custom)
  - Event levels (Error, Warning, or Information)
  - Search by event description



4. Click the arrows to the left of your log timestamps to see events and action details (like information, warnings, and errors) in your log files.



Expanded log from your current day. Only logs with errors and warnings are shown.

Check your Automation logs to troubleshoot problems. If you cannot execute your triggers or actions, Automation records error descriptions in your log files to help you identify and resolve issues.

# 3.5. Printers

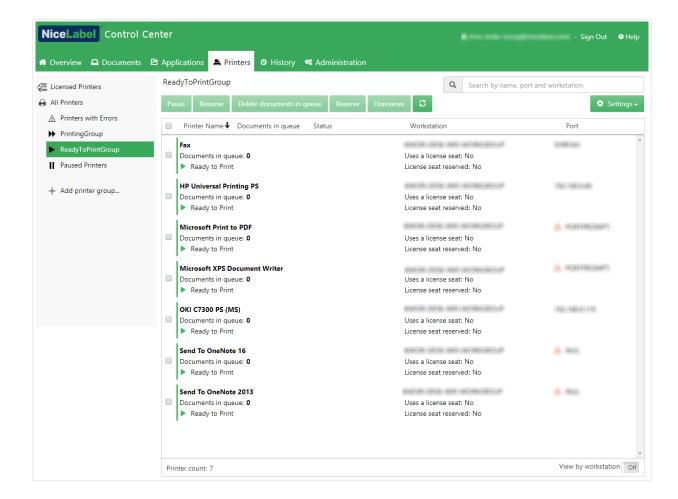
# 3.5.1. Print Management

Print Management is a real-time environment for monitoring and controlling printers and workstations in your Control Center's domain.

With Print Management, each workstation that is paired with a Control Center becomes instantly accessible. The same goes for all of its connected printers. Every installed printer that is visible to the Control Center can be instantly monitored and managed.



Print Management does not require you to manually establish a connection between your workstations and the server that runs the Control Center. Each time the Control Center or workstation comes online, Print Management statuses are updated automatically.



# 3.5.1.1. Selecting Displayed Items

The left sidebar menu allows you to select which item type should be displayed in the central field. Print Management monitors and manages these item types:

- **Licensed printers** lists which printers are using your license seats. Each printer used remains on the Licensed Printers list for 7 days.
- View by printers: lists all visible printers connected to workstations running NiceLabel software linked to the Control Center.



#### TIP

The customized view of printers is available with Label Cloud Business and Label Cloud Unlimited.

- Predefined status printer groups: lists printers according to their current status.
  - **Printers with errors** lists printers reporting various errors.
  - Printing now lists printers currently printing.
  - Ready to print lists printers ready to be used.
  - Paused printers lists printers with paused print jobs.
- Custom printer groups: printers can be grouped using various criteria under a newly created printer group. Existing groups of printers are editable at any time. You can always add new printers, remove existing ones, or change dynamic grouping criteria.
- + Add printer group ...: opens the **Add New Printer Group** dialog. This dialog creates and configures a custom printer group.

### 3.5.1.2. Command buttons

The following command buttons give you control over currently active print jobs on selected printers. At least a single printer or one of the workstations must be selected to make the commands active.

- Pause: pauses current print jobs on selected printers.
- **Resume**: resumes the paused print job on selected printers.
- Delete documents in queue: immediately cancels and deletes the selected active print jobs.



### NOTE

You can only pause/resume printing, and delete the documents in queue for the licensed printers.

- **Reserve**: prevents the selected printers from being removed after idling for more than 7 days. This option keeps the print seat reserved for the selected printer until you manually disable it.
- Unreserve: cancels the reservation of selected printer.
- Refresh reloads the list of printers as defined by the filtering criteria.
- **Settings** allows you to configure the currently selected group of printers.



### **TIP**

The title above the command buttons identifies which item type is currently displayed (All Printers, All Workstations or Printer groups). The number in brackets displays the number of shown items.

### 3.5.1.3. Connected Printers and Workstations

The central field of the Print Management page lists connected printers and workstations according to the defined criteria in the left sidebar menu.

Listed printers or workstations allow selection of individual or multiple items. All commands and settings are done per selected items.



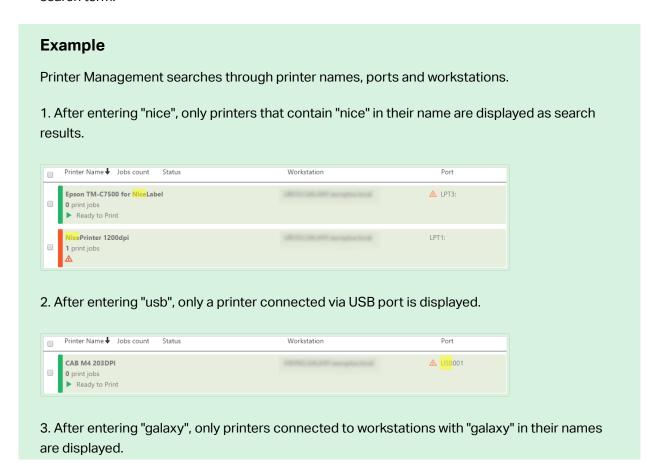
### NOTE

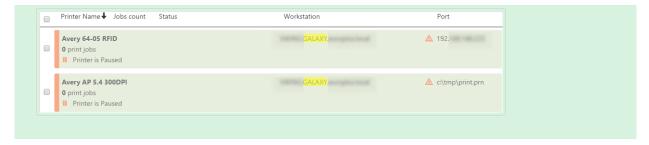
After a new printer is added to any of the connected workstations, the **New printers found** notification is displayed. Newly added printers are not automatically listed right after discovery. To list them with your other printers, click **Refresh Page**.

### 3.5.1.4. Searching and filtering

Use searching and filtering to select the printers or workstations that you wish to manage.

Search field: allows you to find printers that match the characters as you type. Print
Management supports incremental search meaning every inserted character is used as a
search term.





- **Filter**: filters out printers by their current print job statuses.
  - Ready only: only printers ready to be used are displayed.
  - Paused only: only currently paused printers are displayed.
  - Error only: only printers reporting errors are displayed.



### TIP

Terms you type in **Search** and **Filter** fields work hand-in-hand. If only search field is used, the printers that include the entered characters are shown. Filtering works on the entire range of connected printers or on the printers that are found using search terms.

### 3.5.1.5. Bottom row

The bottom row of the central table displays the printer count and allows you to activate the View by workstation option.

- Printer count: displays the number of currently listed printers (as filtered by the grouping criteria).
- Show unlicensed printers: allows you to show or hide the printers which are NOT using your license seats.
- View by workstation: activates a collapsible overview of workstations connected to the Control Center. When expanded, all printers connected to workstation are listed.



### TIP

Selection row allows you to select individual or multiple listed workstations. Master selection allows you to select or deselect all workstations at once.

# 3.5.2. View by Printers

The **All Printers** list is positioned in the central field of your Print Management page. It lists all printers connected to workstations paired with Control Center.

# 3.5.2.1. Licensed Printers

The **Licensed Printers** page tells you which printers are using your license seats. Each used printer remains on the **Licensed Printers** list for 7 days.



### NOTE

If the number of used license seats exceeds the permitted number of seats, Control Center activates a grace period. The software grants you a 30-day time extension during which you can use a doubled number of printers. If you exceed this number, printing is disabled on the additional printers.

By default, Control Center removes a printer from the licensed printers list if you don't use it for 7 days. If a printer is removed from the list, this frees up one license seat and allows you to use another printer.

- Reserve printer prevents the selected printers from being removed after idling for more than 7 days. This option keeps the print seat reserved for the selected printer until you manually disable it.
- Unreserve printer cancels the reservation of selected printers.

The **Licensed Printers** table contains the following fields:

- **Printer**: the name of the printer that is used by one of the NiceLabel applications.
- Location: computer name or IP address to which the printer is connected.
- Port: port to which printer is connected.
- · Last used: time since last printing.
- Reserved: indicates if the selected printer is reserved or not.

# 3.5.2.2. Viewing the Printers



### **TIP**

The functions in this section are only available in Label Cloud Business and Label Cloud Unlimited.

Each row header in the central field table can be used to customize how listed items are sorted.



## **TIP**

The Selection row allows you to select individual or multiple listed printers. If a single printer is selected, all other rows are deselected. To select multiple printers, use Shift + click. Master selection allows you to select or deselect all printers at once. If using Print Management on a tablet or smartphone, clicking on multiple printers adds them to the selection of printers.

# 3.5.2.3. Bottom row

Bottom row of the central table displays the printer count and allows you to activate the **View by workstation** option.

- Printer count: displays the number of currently listed printers (as filtered by the grouping criteria).
- **View by workstation**: activates a collapsible overview of the workstations that are connected to the Control Center. When expanding, all connected printers to the workstation are listed.



## **TIP**

Selection row allows you to select individual or multiple listed workstations. Master selection allows you to select or deselect all workstations at once.

# 3.5.3. Custom Printer Groups

Custom printer groups allow you to organize printers that are visible in Control Center.

Grouped printers allow you to monitor and manage available printers in groups. You can group printers statically or dynamically. This means the grouping criteria is either manually inserted or taken from current events or printer statuses.

Click **+Add printer group...** to add printers to newly created groups. The central field of the Print Management tab opens an empty list of printer groups.

• +Add printer group... button: opens the Add New Printer Group dialog.

# **3.5.3.1. Add New Group**

- Name: sets a name for the newly added printer group.
- Description: allows you to say more about the printer group your are creating.
- **Group type**: allows you to choose if the printer group is static or dynamic:

- Static printer group is a group that consists of manually selected printers. The list of printers remains unchanged.
  - With this option enabled, select printers from the list of **Discovered printers** and add them to the **Printers** in this group list. Printers can later be added or removed using the **Add** and **Remove** buttons.
- **Dynamic printer group** is a group that consists of printers that match the entered search term.

# 3.5.3.2. Existing Printer Groups

Existing printer groups are accessible via left sidebar navigation. After a group is defined, the printers are listed according to user-defined static or dynamic grouping criteria.



# TIP

Selection row allows you to select individual or multiple listed printers. If a single printer is selected, all other rows are deselected. To select multiple printers, use Shift + click. Master selection allows you to select or deselect all printers at once. When using Print Management on tablets or smartphones, clicking on multiple printers adds them to the selection of printers.

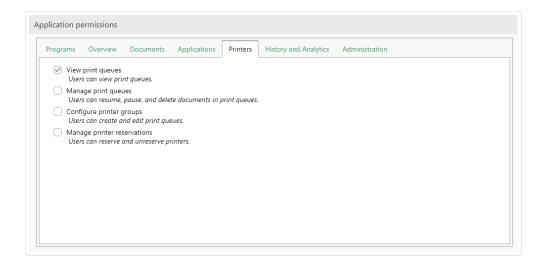
# 3.5.4. Printers Tab Access Rights

You can define the Printers tab accessibility and the range of configurable options for all Control Center access roles.

Print Management access rights are based on user authentication. After users log into Control Center, their assigned roles define the range of granted access rights.

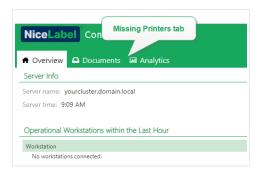
To define the Printers tab access rights for an access role:

- 1. Go to Administration > Access Roles.
- 2. Select the access role and see the **Application Permissions** section.
- 3. Click the **Printers** tab. This is where you set user permissions.



The following role permissions are relevant for the Printers tab:

• View Print Queues: defines if the user is allowed to open and use the Printers tab in Control Center or not. This option keeps the Printers tab visible or hides it. Deselect it to prevent the users that belong to a certain role from accessing the Print Management tab.



- Manage Print Queues: defines if the user is allowed to pause, resume or delete documents in
  print queues or not. This option keeps the command buttons visible or hides them. With this
  option deselected, only Refresh command button remains visible. The user can still monitor the
  print queues, but has no control over them.
- Configure Printer Groups: defines if the user can add and/or configure the existing printer
  groups or not. This option keeps the +Add printer group... and Settings buttons visible or hides
  them.



# TIP

**+Add printer group...** button allows the user to add printers to a newly created printer group. **Settings** button allows the user to configure the currently selected printer group.

# 3.5.5. Understanding Cloud Print

# 3.5.5.1. Introducing Cloud Print

Use our **Cloud Print** service in Label Cloud when you have lots of labels to print but don't want waste time installing and updating software or maintaining infrastructure. Cloud print creates a secure connection between your printers and cloud Control Center so you can **print your labels quickly from anywhere**.

## Cloud printing is:

- Easy: no installation, drivers, special servers, re-configuration, or maintenance required
- Secure: authentication with API access
- **Organized:** with Control Center Analytics integration to show you exactly who prints what, when, and where.
- Accurate: test exactly how Cloud Print works in your system with a non-production sandbox license

Cloud Print is an add-on service for Label Cloud subscriptions.

# 3.5.5.2. Using Cloud Print

Use Cloud Print in different ways to:

- Send print stream data directly to your printers.
- Print labels you save in document storage in Control Center.
- Store labels you save in document storage in Control Center on your printer.

## Cloud Print works with:

NiceLabel products using HTTP request actions (Automatic API authentication).



### **NOTE**

For more information, read the section Configuring Triggers > Using Actions > Data & connectivity > HTTP Request in your Control Center user guide.

- Other products using Cloud Print API (Manual API authentication):
  - SAP
  - · Mobile apps
  - Web apps

· And more



## **NOTE**

Authentication is required for Cloud Print API.

Use Control Center to connect your existing printer hardware.

Cloud Print works with the following printer models:

- All Zebra printers with Link OS.
- **SATO** CLNX printers with firmware 1.10.0 or greater (for firmware upgrades, contact your printer partner or reseller):
  - CL4NX 205 dpi
  - CL4NX 305 dpi
  - CL4NX 609 dpi
  - CL6NX 203 dpi
  - CL6NX 305 dpi
  - CT4-LX 203 dpi
  - CT4-LX 305 dpi
  - FX3-LX 305 dpi

To connect your printers to Label Cloud and use Cloud Print:

- 1. **Prepare your connection:** register your printer on Control Center.
- 2. Connect your printer to Label Cloud: configure your printer hardware.

Use Cloud Print API from NiceLabel's Developer Portal [PROBLEM LINK] to interact with your printers.



## **NOTE**

Your registration procedure depends on your printer manufacturer.

To learn more about connecting Zebra printers, read Connecting Zebra printers to Label Cloud.

To learn more about connecting SATO printers, read Connecting SATO printers to Label Cloud.

To interact with your printers connected to Cloud Print, read Using Cloud Print API.

# 3.5.5.3. Connecting Zebra printers to Label Cloud

Connect your Zebra printer to Label Cloud to use **Cloud Print** API. NiceLabel's Developer Portal gives you APIs to:

- Send print stream data directly to your printers.
- Print labels you save in document storage in Control Center.
- Store labels you save in document storage in Control Center on your printer.

To connect your printers to Label Cloud, complete the following steps (Details below):

- 1. **Prepare your connection:** register your printer on Control Center.
- 2. Connect to Label Cloud: configure your printer hardware.
- 3. Complete your connection: complete your printer registration on Control Center.

# Preparing your Control Center connection:

- 1. In Control Center, go to Printers > Cloud printers and click Add.
- 2. Type your printer **name** (this name identifies your printer in Control Center).



### NOTE

Using spaces or special characters in your printer names may cause errors. Remember your printer name to use later in the connection process.

- 3. Select your printer **model** from the list.
- 4. Copy your **Server URL** (under **Cloud Printer** settings in Control Center).

# Preparing your Label Cloud connection:



### NOTE

You can use any TCP/IP client, but NiceLabel recommends using PuTTY or Zebra Setup Utilities (ZSU).

- 1. Turn on your printer and connect it to the internet.
- 2. Use the same local network as your printer.
- 3. Open your TCP/IP client to register your printer with Label Cloud's print service.
- 4. Configure your TCP/IP client:
  - a. Type your printer's local IP address.

- b. Use default port 9100 (or type the port you set).
- c. (PuTTY only) Select **Telnet** or Raw for your connection type.
- 5. Establish your TCP/IP connection to your Zebra printer (on PuTTY, click **Open**).

Once you establish your TCP/IP connection, you are ready to send SGD commands.

# Connecting to Label Cloud with SGD commands:



### NOTE

Each command starts with: ! U1.



## **NOTE**

If you don't use PuTTY, end your commands with <CR><LF> to be accepted by your printer.

 Set your server URL. In your command terminal, send the following (Replace "Your Server URL" with the Server URL you copy from Control Center):

```
! U1 setvar "weblink.ip.connl.location" "Your Server URL"
```

2. Check that your printer accepts your Cloud Print Server URL. Your printer must return the address you send. Send:

```
! U1 getvar "weblink.ip.conn1.location"
```

3. Reset your printer to apply your settings. Send:

```
! U1 setvar "device.reset" ""
```

4. Get your printer's serial number (Required by Control Center):

```
! U1 getvar "device.unique_id"
```

 Copy your printer's serial number to complete your printer registration on Control Center > Cloud Printers

# Completing registration on Control Center:

- 1. Paste your printer's serial number.
- 2. Click Save.
- Control Center opens a dialogue. You added your printer on Control Center, but it is not connected yet. Control Center lists your printer in the Cloud printers section with the status: Pending connection.

- 4. Click Save.
- 5. Wait 1 minute and refresh your page. Control Center lists your printer in the **Cloud printers** section with the status: **Connected**.

Your Zebra printer is connected and ready to use.

To interact with your printer connected to Cloud Print, read Using Cloud Print API.

# 3.5.5.4. Finding information for Zebra printers

To find your model number or serial number on your Zebra printer and authenticate it in Control Center, follow these steps:

- 1. Turn on your printer and connect it to the internet.
- 2. Find your printer's local IP address (Consult your specific printer documentation).
- 3. Type your printer's IP address into your browser. Click Enter.
  - Your **Printer Home Page** opens and lists information about your printer:
    - Manufacturer (ex: Zebra Technologies)
    - Model number (ex: ZTC ZT410-300dpi ZPL)
    - Serial number (ex: 18J173304133)
    - Name (ex: printer1)
    - · Status (ex: READY)

Use your Zebra printer information from your Printer Home Page to continue with printer registration and authentication in Control Center.

# 3.5.5.5. Connecting SATO printers to Label Cloud

Connect your SATO printer to Label Cloud to use **Cloud Print**API. NiceLabel's Developer Portal gives you APIs to:

- Send print stream data directly to your printers.
- Print labels you save in document storage in Control Center.
- Store labels you save in document storage in Control Center on your printer.

To connect your printers to Label Cloud with Cloud Print:

- 1. **Prepare your connection:** register your printer on Control Center.
- 2. Connect to Label Cloud: configure your printer hardware.

**Prepare** to connect your SATO printer to Control Center:

- In Control Center, go to Printers > Cloud printers and click Add.
- 2. Type your printer **name** (used to identify your printer in Control Center).
- 3. Select your printer **model** from the list.
- 4. Copy your **One-time connection key** to use later.
- 5. Click the **link** to download **NiceLabel Connector** for your printer.
- 6. Click Save.

Control Center opens a dialogue. You added your printer on Control Center, but it is **not connected yet**. Control Center lists your printer in the **Cloud printers** section with the status: **Pending connection**.

**Connect** your SATO printer to Control Center. You need your USB drive and NiceLabel Connector:

## On your computer:

- 1. Download Connector from Control Center.
- 2. Insert your USB drive (maximum USB drive size is 8Gb).
- 3. Format your USB drive to FAT32.
- 4. Copy Connector to your formatted USB drive.
- 5. Remove your USB drive.

### On your printer:

- 1. Insert your USB drive.
- Run Connector and press ✓ to install.
   Connector installs and your printer restarts automatically.
- 3. Remove your USB drive.
- 4. Use your printer configuration menu (**Menu > 1. Configuration**) to type configuration information.



## TIP

Connect your USB keyboard to your printer to quickly type your information.

- 5. Confirm your printer's description.
- 6. Type your **account name** (ex: yourcompany1 is the account name for the Control Center address yourcompany1.onnicelabel.com).
- 7. Under password, type your One-time connection key
- Use your printer menu navigation to press ✓ to put your printer online
   Your printer completes the connection process and displays NiceLabel Connector -AVAILABLE.

Your printer is configured. Control Center lists your printer in the **Cloud printers** section with the status: **Connected**. Your SATO printer is connected and ready to use.

To interact with your printer connected to Cloud Print, read Using Cloud Print API.

# 3.5.5.6. Understanding Cloud Print API

Use **Cloud Print**API from NiceLabel's Developer Portal to test how API features work in applications you develop and to test how NiceLabel products integrate with your external business applications. With Cloud Print API, you can:

- Send print stream data directly to your Cloud Print connected printers.
- Print labels you save in document storage in Control Center.
- Store labels you save in document storage in Control Center on your printer.

### Cloud Print works with:

NiceLabel products using HTTP request actions (automatic API authentication).



### NOTE

For more information, read the section Configuring Triggers > Using Actions > Data & connectivity > HTTP Request in your Control Center user guide.

- Other products using Cloud Print API (manual API authentication):
  - SAP
  - · Mobile apps
  - · Web apps
  - · And more

To use Cloud Print API on Developer Portal, you must:

- Set up your Developer Portal account.
- Create your free subscription for our Label Cloud product.
- Connect your Developer Portal subscription with Control Center.



### NOTE

Developer Portal includes auto-generated code samples in multiple programming languages.

# Getting ready to use Cloud Print API

# **Setting up your Developer Portal account**

### **InControl Center:**

- 1. Open Control Center in your browser.
- 2. Go to Applications > Cloud Integrations.
- 3. Click **+Add**. The **Integrators** page opens.
- 4. Type the **Name** of the integrator to add (usually yourself).
- 5. Copy the Key.
- Click Save.

Control Center lists your new integrator on the Cloud Integrations page with the status: **No developer subscribed**.



## **NOTE**

Your Control Center user account must have **manage cloud integrations** permissions.

# On the Developer Portal:

- 1. Open the Developer Portal in your browser.
- 2. Click **Sign up**. The Registration page opens.
- 3. Enter your information and click **Sign up**.
- 4. Go to your email inbox and open the email the Developer Portal sends you (check your Junk folder).
- 5. Click the confirmation link in the email. Your Developer Portal profile page opens.

You are registered on the Developer Portal. To use APIs, subscribe to Cloud Print APIs and connect your subscription to Control Center, read the following sections.



### NOTE

For more information, read the Cloud Triggers section of your Control Center user guide.

## Subscribing to Label Cloud on NiceLabel Developer Portal

After you set up your account on the Developer Portal, subscribe to specific products to use their APIs, and then connect your subscription to Control Center. Subscriptions to Developer Portal products are **free** and use primary and secondary keys for authentication. To use Label Cloud APIs, subscribe to the Label Cloud product on the Developer Portal:

- 1. Sign in to NiceLabel Developer Portal.
- 2. Go to Products > Label Cloud.
- 3. Click Add subscription.
- 4. Type your subscription name (if you have multiple customers, choose customer-specific names).
- Click Confirm.

Your profile page opens with the dialogue: You have successfully subscribed to the Label Cloud product. Try the APIs in this product now. You are subscribed in the Developer Portal, but you must connect your subscription to Control Center before you can use Cloud Print API.



### NOTE

Subscribing generates two separate keys. Use them for multiple program versions and added security. If your primary key becomes compromised, use your secondary key and regenerate your primary key. For more information, read the Cloud Triggers section of your Control Center user guide.

### Connecting your Developer Portal subscription to Label Cloud

After you register and create your subscription on Developer Portal, you must connect your subscription to Control Center before you use Cloud Print APIs in your programs.

- 1. Go to Control Center > Applications > Cloud Integrations.
- 2. Find the integrator connected to your Developer Portal subscription, and click **Copy the key**.
- 3. In a new tab, **Sign in** to NiceLabel Developer Portal.
- 4. Go to Products > Label Cloud.
- 5. Click Developer Sign Up API v1.
- 6. Click Try it.
- 7. Type or paste your **key** from Control Center in the **IntegratorKey** box.
- 8. Under **Authorization**, select your primary or secondary subscription key (use primary by default). For multiple customers, make sure you select the correct subscription.
- 9. Click Send.

Return to **Control Center > Applications > Cloud Integrations** and refresh your browser tab. Control Center lists your user status as **subscribed**. You are connected and ready to use Cloud Print API.

# **Using Cloud Print API**

# Printing or recalling labels saved in Document Storage with Cloud Print API

Once you subscribe to Label Cloud API on Developer Portal and connect your subscription, you can test how printing works for labels stored in Document Storage in Control Center using API:

- 1. Sign in to NiceLabel Label Cloud API Developer Portal.
- 2. Go to APIs > Cloud Print API and click v1. The Cloud Print API page opens.
- 3. Go to **Print** and click **Try it**.
- 4. Type your printer name (Cloud printers must be connected to Control Center).
- 5. Select your content type (JSON or XML, your request body changes).

# In your Request body:

 Type the file path for your label in Document Storage in Control Center. You can use label files (.nlbl) or solutions (.nsln). For solutions, define your label name:
 Label:

```
"FilePath": "/MyFolder/MyLabel.nlbl",

Solution:

"FilePath": "/Labels/YourSolution.nsln",

Labelname:
"LabelName": "YourLabel1",
```

- 2. Optional: define your file version.
- 3. Type the quantity of labels to print. To print 3 labels, type:

```
"Quantity": 3,
```

- 4. Optional: if your labels have variables, add them here (for simple labels or test prints, delete this section).
- 5. Optional: to use specific printer settings, Base64 encode your devmode.
- 6. Click Send.

Your printer prints your label.

# Storing labels on your printer with Cloud Print API

Test how storing labels in your printer's internal memory works using API:

- 1. Sign in to NiceLabel Label Cloud API Developer Portal.
- 2. Go to APIs > Cloud Print API and click v1. The Cloud Print API page opens.
- 3. Go to Store and click Try it.
- 4. Type your printer name (for Cloud printers connected in Control Center).
- 5. Select your content type (JSON or XML, your request body changes).

## In your Request body:

 Type the file path for your label in Document Storage in Control Center. You can use label files (.nlbl) or solutions (.nsln). For solutions, define your label name:
 Label:

```
"FilePath": "/MyFolder/MyLabel.nlbl",
```

### Solution:

```
"FilePath": "/Labels/YourSolution.nsln",
```

#### Label name:

```
"LabelName" : "YourLabel1",
```

- 2. Optional: type your file version.
- 3. Optional: type your stored label name (used on your printer if you generate your own recall stream).



## **NOTE**

If you recall stored labels with the **Print** action, delete this setting to store your label with their default label names.

- 4. **Required**: type your printer store variant (your printer memory).
- 5. **Optional**: define Base64 encoding (for simple labels or test prints, delete this section).
- Click Send.

Your label is stored on your printer. To recall your stored label, use the Print action (see previous section).



# **NOTE**

You can generate your own recall steams and send them to your printer using the SendData action. You can also use the Print action to generate recall streams, but your labels must be saved in Document Storage.

# **Listing Cloud Printers with Cloud Print API**

When you develop applications where users print labels with cloud printers, use API to get a list of your registered cloud printers and their statuses (you can see Cloud Printers in Control Center under **Printers** > **Cloud Printers**):

- 1. Sign in to NiceLabel Label Cloud API Developer Portal.
- 2. Go to APIs > Cloud Print API and click v1. The Cloud Print API page opens.
- 3. Go to Printers and click Try it.
- Click Send.

In **Response content**, Developer Portal displays your registered cloud printers in JSON format.

# Sending data to your printers with Cloud Print API

If you use applications that generate print streams, store streams, or recall streams, use the SendData action to send your generated streams to your printers. The SendData action sends generated streams or raw commands in printer-specific language. Base64 encoding ensures your labels print special characters correctly.



## **NOTE**

Printing with this process may require printer drivers.

- 1. **Sign in** to NiceLabel Label Cloud Developer Portal.
- 2. Go to APIs > Cloud Print API and click v1. The Cloud Print API page opens.
- 3. Go to SendData and click Try it.
- 4. Type your printer name (for Cloud printers registered in Control Center).

In your request body, send Base64 encoded data to your printer:

- 1. Generate your stream (in Designer, print your label to file, or use your own external applications to generate .prn files.).
- 2. Convert your stream to Base64 (for testing, you can use online conversion tools).
- 3. Paste or type your Base64-encoded stream into your request body.
- 4. Click Send.

Your request sends. If you encoded a label print stream, your printer prints your label.

# 3.6. History

# 3.6.1. History

Control Center offers a detailed history log of all events in the printing system and a flexible sorting and filtering system, which assists you in finding the events that you're interested in. The events can either be displayed on a single list or split into the following categories:

- Printing. All events directly related to print jobs.
- Errors. Reported printing errors.
- System. Audit log with documentary evidence of past activities.
- Alerts. List of issued alerts in printing system.
- All Activities. Aggregated overview of all past activities.

# 3.6.1.1. Data Filtering

A default view to the collected data is one day of event history. You can quickly adjust the time-frame using the combo box selection with predefined time intervals.

After selecting the preferred time interval, the page updates and shows the events from selected interval. If the items do not fit on a single page, you can navigate to the next pages with results.





To further drill-down for the data of interest and define a custom filter click **Define filter**. You may create a filter on other parameters, such as print application names, workstation names, user names, label names, values of variables and many more.

# 3.6.1.2. Printing

**Printing History** page displays the list of past printing events. Each event includes information regarding source application of the print job, workstation and user who initiated it, which printer it was executed on, when the event took place, and action status.

**Printing History** offers a comprehensive log of all printing activities performed in the past. The filter enables you to either choose from a preset selection of past time intervals, or to use an advanced filter using which you can accurately pinpoint the printing jobs you're interested in based on the available information.



#### TIP

Partial search is also possible. For example, searching for "300DPI" shows all printers that contain this substring.

Activity Details page displays detailed information about the selected printing event.

# 3.6.1.3. Activity Details

The following information items are displayed in the **Details** section:

- **Status.** Last-known print job status as reported through the Spooler event from Windows operating system. The print job status is updated in real time to reflect the actual live status of the selected print job. For more details about available statues, read section Job Statuses.
- Label Name. Specifies name of the label file that was used for printing.
- Solution Name. Specifies name of the solution which stores the file that was used for printing.



# **NOTE**

Solution Name is visible only if a label in a solution (.NSLN file) was printed.

- Requested Quantity. Specifies the number of labels that were instructed to print.
- Begin Print Time. Specifies the time, when the data was submitted for printing.
- End Print Time. Specifies the time, when the print job was created.
- Printer. Shows the name of the printer driver that was used for printing.
- Metadata. Shows the content of label metadata (document description) as defined by the user.

- Workstation. Specifies name of the computer that executed printing.
- **User.** Specifies name of the user who executed printing. This can be user name defined in Windows AD, or locally defined application user.

The following information is displayed in the **Label Jobs** section.

- Job selector. Use arrows to browse through the printed labels within a single print job.
- ID. Unique internal ID of the printed label.
- Quantity. Specifies the number of labels that were printed.
- Status. Specifies the last known status of the label within a print job as reported from the
  NiceLabel printer driver. To see these statuses you have to enable the option **Detailed printing**control in the printing NiceLabel application (Designer). For more details about available
  statues, read section Job Statuses.
- Vision inspection. Indicates if the printed label failed or passed your vision inspection process.
   The external system uses cameras to check if the printed labels meet the company's layout and content guidelines.



A new field for the vision inspection indication becomes visible after your external system connects and provides feedback to your Control Center database by updating the following tables and fields for the specific print job.

- 1. Select tables nan. LabelJob and nan. PrintJob.
- 2. Change the VisionInspection column values from NULL to True (label vision inspection passed) or False (label vision inspection failed).
- RF Tag. Specifies the information encoded in the Radio-frequency tag



### NOTE

RF tag is visible only if a smart label was printed.

- Details. Specifies a collection of variable names and their values as used in the label.
- Variables. List of variables which are connected to the label.
- Print preview. Preview of the printed label.

# 3.6.1.4. Additional Details

To see more label-design related details, such as label time stamp, click the **Additional Details** option in the left-hand pane.

The additional fields provide information about:

- Has Header. Provides information if the label contains header label. The header label prints
  once as the very first label in the batch.
- **Has Tail.** Provides information if the label contains tail label. The tail label prints once as the very last label in the batch.
- Number of sets. Specifies the number of print process repetitions. One label set contains all labels from a single batch. The print process can be configured to print a single label set many times (creating copies).
- Set Number. Specifies information about which set this is.
- Label Time stamp. Displays the time-stamp of the print process, when it occurred.

## 3.6.1.6. Errors

**Errors** panel provides an overview of logged printing errors in the system. Each error is displayed with the information describing the type of error, the module that returned the error, the workstation and user that submitted the job which returned the error, and the time of occurrence.

Clicking on one of the entries displays the information regarding the error.

#### **Activity Details**

- Status. Provides information about the event status.
- Module. Provides the name of the application reporting the data.
- Created. Specifies time-stamp when the event occurred.
- Workstation. Specifies the Windows name of the workstation reporting the event.
- User Name. Specifies the name of the user executing the event.
- Info. Provides basic event information.
- Details. Provides details about the event.

## **Error Details**

- ID. Unique error ID.
- Module. Provides the name of the application reporting the data.
- Severity. Success, information, warning, error or question.

- **Type.** Event type.
- **Group.** For example database errors, printer errors.
- Info. Provides general information about what caused the error.
- **Details.** Provides detailed information about what caused the error.

# 3.6.1.7. System

**System History** page provides complete documentary evidence for all activities that affect a specific operation, procedure or event in the Control Center.

Audit records displayed on **System History** page include the below listed activities. Activities are sorted by **Event Types**.

- Client Login. Clients logging in (Designer, Print and Web Printing clients):
  - Client login is also logged if incorrect password is entered.
  - Client login is also logged in case of insufficient permissions to start the program.
- Printer groups. Changes made in printer groups:
  - · Added, deleted or edited devices.
  - Added or removed printer from group.
- Authentication. Changes made in authentication mode.
- Access roles. Changes made in access roles:
  - · Role added, deleted or edited.
  - · Member added or removed from a role.
- Users and Groups. User changes and changed group settings:
  - · Groups added, deleted or edited.
  - Users added, deleted or edited.
- WebClient. Web client changes:
  - · Web client added, deleted or edited.
- VersioningAndWorkflow. Changes in versioning and workflow:
  - · Adjusted settings.
- **License.** License violation on connected workstations are logged. The type of violation is explained in the Details row.
- **Document storage.** Logged changes and actions on the documents that you store in your Document Storage. The logged events include:

- Delete files. The event of deleting files is marked with **Delete**. The logged event includes the original path of each deleted file.
- Restore files. The event of restoring files back to your Document Storage is marked with Restore. The logged event includes the original path of each restored file.
- Cut/paste files. The logged event is marked with Move, and tells you the original and the final location for each moved file.
- Purge files. The event of permanently deleting files from your document storage is marked with **Purge**. The file's original path is included.
- Check out/Check in. If you check out a file, and check the file back in, your Control Center logs this event as Check Out/Check In.
- Restore file. The event of deleting and restoring files is marked with Restore. The file's original path is included.
- Change folder permissions. If you change user permissions for any folder, your Control Center logs such event as **Permission changed**.
- Commission/decommission. If you decommission a published file, and recommission the file again, your Control Center logs such event as **Decommission/Recommission**.
- Set workflow on folder. If you apply a workflow to a specific folder, Control Center logs such event in History as Workflow step.

To log these changes and actions, enable file versioning in your Control Center first. Go to Administration > Versioning and Workflows, and enable Versioning for Document Storage.



## **TIP**

License violation results from exceeded number of allowed printers or from exceeded number of allowed NiceLabel 2019 installations per license.

# 3.6.1.8. Alerts

All printing activities in NiceLabel applications are reported as events. Certain event types are more important than others, for example errors. To be able to react quickly, it is important to be notified as soon as errors happen. You can enable the Control Center to issue email alerts with different notification options. Alerts are created based on module, error type or severity. Based on error importance or communication capabilities of the environment, alert action can be an SMTP email, RSS 2.0 Feed, or an SMS message.

The **Alert History** section provides a list of issued alerts in the printing system. All alerts are displayed, and the information available depends on the type of alert that was issued.

If your computer reports multiple identical label printing errors, Control Center History does not display alerts for each of these errors. In case of repeating printing errors, you receive a new alert every 15 minutes.

## **Example**

You are printing labels using your primary warehouse printer. Each minute you print one label. After your primary warehouse printer stops printing due to malfunction, Control Center sends you the first alert and logs the alert in History. Control Center does not send the next alert after a minute as expected from the printing rate (1 label per minute), but after 15 minutes if your printer remains offline.



# **NOTE**

The 15-minute alert delay only happens if you are continuously printing identical label files using the same printer. If you change the label file or printer, you receive alert immediately after your computer reports Control Center an error.

Clicking on an alert displays more detailed information about the alert's status, as well as a link to the event that triggered the alert.

# 3.6.1.9. All Activities

**All Activities** panel presents an aggregated overview of all past Control Center activities in a given time period. To filter out the relevant events, click **Define filter** to set your custom filter. The following filtering categories are available:

- Date Range. Filters by day, week, month, or a custom time range.
- Type. Filters by label printing events or log entries.
- Module. Filters by the module used, e.g. NiceLabelDesigner or NiceLabelPrint.
- Status. Filters by print job status.
- Workstation. Filters by the connected workstation that sent the printing command.
- **User.** Filters by the assigned user who sent the printing command.
- **Information and Details.** Filters by the content that is added to the printed label using the Log Event action on the assigned form.



# TIP

Log Event action enables you to add basic and detailed descriptions of events that are stored in Control Center. **Information** field allows you to use up to 255 characters, while the **Details** field can include content with up to 2000 characters.

# 3.6.2. Job Statuses

# 3.6.2.1. Print job statuses

Possible print job statuses are:

- **Deleting:** job has been deleted from the spooler.
- **Deleted:** spooling process has been interrupted because the print job has been manually deleted from the print queue.
- Error: error condition on the printer typical reason could be head opened on the printing device.
- Error Printing: The error condition is due to a port conflict.
- Paused: this print job has been paused.
- Printed: print job has been successfully sent to the printing device.
- **Printing:** printer is processing the sent print job .
- Restarting: complete print job will be resent to the printing device.
- **Queued:** print job is in the waiting line in the spooler and will be sent to the printing device, when it has finished processing the previous job.
- Start spooling: print job has started to be sent to the printing device.
- **Spooling:** print job is being sent to the print spooler.
- **Spooled:** print job has been created in the print spooler without errors.
- **Spool failed:** while print job has been sent to the printing device, an error has occurred during print or the job was canceled.

# 3.6.2.2. Label job statuses



# NOTE

You have to use NiceLabel printer driver in order to see label job status. If you do not use NiceLabel printer driver, the final label status is "Spooled".

The possible label job statuses are:

- Preparing: data for label job is just being processed and will be sent into print spooler.
- **Send failed:** label job could not be sent to the printing device successfully. The printer has reported a problem.
- Sent: label job has been successfully sent to the printing device.

- Sending: label job is being sent to the printer.
- **Spool failed:** while print job has been sent to the printing device, an error has occurred during print or the job was canceled.
- **Spooled:** label job has been created in the print spooler without errors.

# 3.6.3. Reprinting Labels

You can reprint all labels in the job or a selection of labels from a past printing event. The labels can be reprinted on the original client and the original printer. If the label is saved in the Document Storage it can also be printed by some other client (because the client has access to it in the Document Storage) and on some other printer. If you change the target printer, make sure it has loaded labels of the same type & dimensions.

When using the reprint functionality with remotely stored labels, the label path should be entered in the UNC form (\\server\share\folder rather than a windows syntax with a mapped drive to avoid conflicts when the user is logged on under a different Windows account from the one that performed the original print.

To **reprint** the job to another printer, do the following:

- 1. In History tab, click a printing activity to open its details.
- 2. Click **Reprint** in the left-hand pane.
- 3. Select the range to be reprinted and the printer to use for the reprint, and confirm your settings.

# 3.6.3.1. Prerequisites for label reprinting

Label reprint action is executed on the remote NiceLabel client by NiceLabel Automation. If you do not have NiceLabel Automation installed, reprint will not be possible.

Make sure the following prerequisites are met:

- The label file is saved in the Document Storage. This ensures that all clients have access to the file and the label can be reprinted on any client.
- NiceLabel clients are activated with the same LMS license as Control Center.
- The label your are reprinting does not use global variables. If multiple labels share global variables, you cannot reprint these labels. To read more about global variables, see section Global Variables.
- Make sure the firewall allows inbound connection on the clients to the NiceLabel Automation on port 56416 TCP.



### NOTE

You cannot reprint labels with headers and/or tails. If you are experiencing issues while reprinting certain labels, open these labels in Designer and check first if they include header and tail.



## **NOTE**

For more information, see the Installation Guide.

# 3.7. Analytics

# 3.7.1. Introducing Analytics

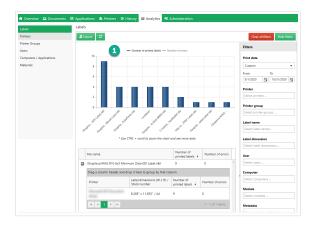
NiceLabel Analytics in Control Center helps you monitor and analyze your entire label printing process, giving you ways to understand what and how you print. In enterprise environments, Analytics helps you know:

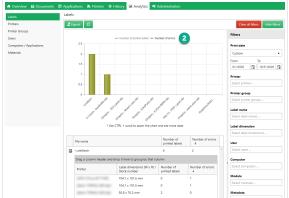
Which users print which labels from which computers with which programs on which printers using which materials.

You can quickly sort and find information you need with these data **Filters** and tabs:

- Labels—file names, amounts printed, printers used, dimensions, stock numbers.
- Printers—models, amounts printed, dimensions, stock numbers.
- Printer Groups—which groups, amounts printed, dimensions, stock numbers.
- Users—user names, amounts printed, printers used, dimensions, stock numbers.
- **Computers/Applications**—computers, modules (Automation, Control Center, Designer, Print, Printer Driver, SDK, Web Printing), labels printed, printers used, dimensions, stock numbers.
- Materials—label dimensions, stock numbers, amounts printed, printers used.

Use Analytics to sort, monitor, and analyze your printing process in Control Center. Analytics helps you organize and plan your printing tasks, improve your printing processes, and find ways to decrease your printing costs.





Click the top of your bar graph to switch views between your **Number of printed labels** (1) and **Number of errors** (2).

To use Analytics, click the **Analytics** tab in your cloud-based or on-premise Control Center.



### **NOTE**

If your **Analytics** graphs and detailed lists are empty, or you experience other display errors, try disabling your browser's ad blocker. For the best user experience, NiceLabel suggests you disable your ad blocker or whitelist Control Center.

# 3.7.2. Optimizing label usage with Analytics

Know which labels print how often on which printers using which materials.

When you want to decrease labeling costs, use NiceLabel Analytics in Control Center to view and analyze which labels you print the most so you can get the biggest savings with the smallest changes to your labels. You can customize print date ranges and see specific label data with Filters.

To view and filter your label printing data, follow these steps:

- 1. Open Analytics in NiceLabel Control Center.
- To sort your data by label file name, click the Labels tab (on your left).
   To sort your data by label dimensions, click the Materials tab (on your left).
   Analytics displays your bar graph and list of label printing data (toggle to display number of errors).
- 3. Scroll down to view your list of file names, numbers of printed labels, and numbers of errors.
  - **File names** contain full paths of labels you print. If your labels are parts of solutions, Analytics displays full solution paths and your label names.
  - Number of printed labels shows how many labels you print on rolls. If you print your labels on sheets of paper, Analytics displays how many pages you use (ex: 33 pages of labels).

- Number of errors shows how many errors occurred.
- Toggle the black arrows (on your left) to view label-specific detailed lists.
  - Select columns to sort or drag/drop column headers to group by column data.
  - Sort by printers, label dimensions (width x height)/stock number, or labels printed.
  - Analytics displays your label dimension information in the following ways:

Display Example:	Meaning:
10 x 5 cm	Dimensions in cm
3" x 6"	Dimensions in inches
30 x 22 mm	Dimensions in mm
40 x ?	Width is constant, but label height is variable. Your label length depends on the amount of data in your label.
10 x 7 cm / A4	When you print on sheets of paper, Analytics shows label dimensions and paper size.
30 x 20 mm / A4 - STOCK9i9i	Analytics shows your label dimensions, paper size, and stock number.

Analytics displays label printing data from this month on your graph and list by default.

- 5. To see data from another print date range, use the **Print date** filter (on your right).
  - Use the drop-down menu to select pre-defined date ranges.
  - Customize your print date range by entering dates in the **From** and **To** fields.
- To see data from specific labels, use the **Label name** or **Label dimension** filters (on your bottom right).
  - Use the drop-down menu to select/deselect specific labels.
- 7. Apply multiple filters at once to fine-tune your data view and find exactly what data you need.
  - For more information, see Applying multiple filters in Analytics.
- 8. Click **Export** (top of page) to download your data.
  - Analytics includes your applied data filters and only exports data you see.
  - Your data is downloaded as an .xml file you can open in Microsoft Excel spreadsheet.

Use Analytics to view and analyze label printing data during print date ranges you select. Use this data to optimize your printing processes and find ways to decrease your costs.

# 3.7.3. Optimizing printer workloads with Analytics

Know which **printers** print which **labels** and **how often**.

When your printing workloads are not evenly distributed between your printers, use NiceLabel Analytics in Control Center to view and analyze which printers print the most labels so you can more efficiently distribute you workloads. You can customize print date ranges and see specific printer data with Filters.

To view and filter your printer workloads, follow these steps:

- 1. Open **Analytics** in NiceLabel Control Center.
- Click the **Printers** tab (on your left).
   Analytics displays your bar graph and list of printer data (toggle to display number of errors).
- 3. Scroll down to view your list of printers, labels they print, and errors.
  - **Number of printed labels** shows how many labels you print on rolls. If you print your labels on sheets of paper, Analytics displays how many pages you use (ex: **33 pages of labels**).
  - Number of errors shows how many errors occurred.
- 4. Toggle the **black arrows** (on your left) to view printer-specific detailed lists.
  - Select columns to sort or drag/drop column headers to group by column data.
  - Sort by label dimensions (width x height)/stock number, or labels printed.
  - Analytics displays your label information in the following ways:

Display Example:	Meaning:
10 x 5 cm	Dimensions in cm
3" x 6"	Dimensions in inches
30 x 22 mm	Dimensions in mm
40 x ?	Width is constant, but label height is variable. Your label length depends on the amount of data in your label
10 x 7 cm / A4	When you print on sheets of paper, Analytics shows label dimensions and paper size
30 x 20 mm / A4 - STOCK9i9i	Analytics shows your label dimensions, paper size, and stock number

Analytics displays printing data from this month on your graph and list by default.

- 5. To see data from another print date range, use the **Print date** filter (on your right).
  - Use the drop-down menu to select pre-defined date ranges.
  - Customize your print date range by entering dates in the **From** and **To** fields.
- 6. To see data from specific printers, use the **Printer** filter (on your right).
  - Use the drop-down menu to select/deselect specific printers.

- 7. Apply multiple filters at once to fine-tune your data view and find exactly what data you need.
  - For more information, see Applying multiple filters in Analytics.
- 8. Click **Export** (top of page) to download your data.
  - · Analytics includes your applied data filters and only exports data you see.
  - Your data is downloaded as an .xml file you can open in MS Excel.

Use Analytics to view and analyze printer workloads during print date ranges you select. Use this data to optimize and redistribute uneven printing workloads.

# 3.7.4. Optimizing printer group workloads with Analytics

Know which printer groups print which labels and how often.

When your printing workloads are not evenly distributed between your printer groups, use NiceLabel Analytics in Control Center to view and analyze which printer groups print the most labels so you can more efficiently distribute you workloads. You can customize print date ranges and see specific printer group data with **Filters**.

To view and filter your printer group workloads, follow these steps:

- 1. Open Analytics in NiceLabel Control Center.
- Click the **Printer Groups** tab (on your left).
   Analytics displays your bar graph and list of printer group data (toggle to display number of errors).
  - Number of printed labels shows how many labels you print on rolls. If you print your labels on sheets of paper, Analytics displays how many pages you use (ex: 33 pages of labels).
  - Number of errors shows how many errors occurred.
- 3. Scroll down to view your list of printer groups and labels they print.
- 4. Toggle the **black arrows** (on your left) to view printer group-specific detailed lists.
  - Select columns to sort or drag/drop column headers to group by column data.
  - Sort by label dimensions (width x height)/stock number, or labels printed.
  - Analytics displays your label information in the following ways:

Display Example:	Meaning:	
10 x 5 cm	Dimensions in cm	
3" x 6"	Dimensions in inches	
30 x 22 mm	Dimensions in mm	

40 x ?	Width is constant, but label height is variable. Your label length depends on the amount of data in your label
10 x 7 cm / A4	When you print on sheets of paper, Analytics shows label dimensions and paper size
30 x 20 mm / A4 - STOCK9i9i	Analytics shows your label dimensions, paper size, and stock number

Analytics displays printing data from this month on your graph and list by default.

- 5. To see data from another print date range, use the **Print date** filter (on your right).
  - Use the drop-down menu to select pre-defined date ranges.
  - Customize your print date range by entering dates in the **From** and **To** fields.
- To see data from specific printer groups, use the Printer group filter (on your bottom right).
  - Use the drop-down menu to select/deselect specific printer groups.
- 7. Apply multiple filters at once to fine-tune your data view and find exactly what data you need.
  - For more information, see Applying multiple filters in Analytics.
- 8. Click **Export** (top of page) to download your data.
  - Analytics includes your applied data filters and only exports data you see.
  - Your data is downloaded as an .xml file you can open in Microsoft Excel.

Use Analytics to view and analyze printer group workloads during print date ranges you select. Use this data to optimize and redistribute uneven printing workloads.

# 3.7.5. Optimizing user workloads with Analytics

Know which users print which labels on which printers and how often.

When your printing workloads are not evenly distributed between your users, use NiceLabel Analytics in Control Center to view and analyze which of your users print the most labels so you can more efficiently distribute your user workloads. You can customize print date ranges and see specific user data with **Filters**.

To view and filter your user printing workloads, follow these steps:

- 1. Open **Analytics** in NiceLabel Control Center.
- Click the **Users** tab (on your left).
   Analytics displays your bar graph and list of user data (toggle to display number of errors).
- 3. Scroll down to view your list of users, labels they print, and errors.

- a. **Number of printed labels** shows how many labels you print on rolls. If you print your labels on sheets of paper, Analytics displays how many pages you use (ex: **33 pages of labels**).
- b. **Number of errors** shows how many errors occurred.
- 4. Toggle the **black arrows** (on your left) to view user-specific detailed lists.
  - Select columns to sort or drag/drop column headers to group by column data.
  - Sort by printers, label dimensions (width x height)/stock number, or labels printed.
  - Analytics displays your label information in the following ways:

Display Example:	Meaning:
10 x 5 cm	Dimensions in cm
3" x 6"	Dimensions in inches
30 x 22 mm	Dimensions in mm
40 x ?	Width is constant, but label height is variable. Your label length depends on the amount of data in your label
10 x 7 cm / A4	When you print on sheets of paper, Analytics shows label dimensions and paper size
30 x 20 mm / A4 - STOCK9i9i	Analytics shows your label dimensions, paper size, and stock number

Analytics displays printing data from this month on your graph and list by default.

- 5. To see data from another print date range, use the **Print date** filter (on your right).
  - Use the drop-down menu to select pre-defined date ranges.
  - Customize your print date range by entering dates in the **From** and **To** fields.
- 6. To see data from specific users, use the **Users** filter (on your bottom right).
  - Use the drop-down menu to select/deselect specific users.
- 7. Apply multiple filters at once to fine-tune your data view and find exactly what data you need.
  - For more information, see Applying multiple filters in Analytics.
- 8. Click **Export** (top of page) to download your data.
  - Analytics includes your applied data filters and only exports data you see.
  - Your data is downloaded as an .xml file you can open in Microsoft Excel.

Use Analytics to view and analyze user printing workloads during print date ranges you select. Use this data to optimize and redistribute uneven printing workloads.

# 3.7.6. Optimizing computer workloads with Analytics

Know which computers and which programs print which labels on which printers and how often.

When your printing workloads are not evenly distributed between your computers, use NiceLabel Analytics in Control Center to view and analyze which of your computers print the most labels so you can more efficiently distribute your workloads. You can customize print date ranges and see specific computer and program module data with **Filters**.

To view and filter your computer/module printing workloads, follow these steps:

- 1. Open **Analytics** in NiceLabel Control Center.
- Click the Computers/Applications tab (on your left).
   Analytics displays your bar graph and list of computer and application data (toggle to display number of errors).
- 3. Scroll down to view your list of computers, modules, amounts of labels printed, and errors.
  - Computers are computers you use to print.
  - **Modules** are programs you use to print (Automation, Control Center, Designer, Print, Printer Driver, SDK, Web Printing).
  - Number of printed labels shows how many labels you print on rolls. If you print your labels on sheets of paper, Analytics displays how many pages you use (ex: 33 pages of labels).
  - Number of errors shows how many errors occurred.
- 4. Toggle the **black arrows** (on your left) to view computer-specific detailed lists.
  - Select columns to sort or drag/drop column headers to group by column data.
  - Sort by printers, label dimensions (width x height)/stock number, or labels printed.
  - Analytics displays your label information in the following ways:

Display Example:	Meaning:
10 x 5 cm	Dimensions in cm
3" x 6"	Dimensions in inches
30 x 22 mm	Dimensions in mm
40 x ?	Width is constant, but label height is variable. Your label length depends on the amount of data in your label
10 x 7 cm / A4	When you print on sheets of paper, Analytics shows label dimensions and paper size.
30 x 20 mm / A4 - STOCK9i9i	Analytics shows your label dimentions, paper size, and stock number.

Analytics displays printing data from this month on your graph and list by default.

- 5. To see data from another print date range, use the **Print date** filter (on your right).
  - Use the drop-down menu to select pre-defined date ranges.
  - Customize your print date range by entering dates in the **From** and **To** fields.
- To see data from specific computers or modules, use the Computer or Module filters (on your bottom right).
  - Use the drop-down menu to select/deselect specific computers or modules.
- 7. Apply multiple filters at once to fine-tune your data view and find exactly what data you need.
  - For more information, see Applying multiple filters in Analytics.
- 8. Click **Export** (top of page) to download your data.
  - · Analytics includes your applied data filters and only exports data you see.
  - Your data is downloaded as an .xml file you can open in Microsoft Excel.

Use Analytics to view and analyze computer printing workloads during print date ranges you select. Use this data to optimize and redistribute uneven printing workloads.

# 3.7.7. Applying multiple filters in Analytics

Use Analytics filters in NiceLabel Control Center to understand your label printing processes. Apply multiple filters at once to fine-tune your data view and find exactly the data you need for analysis, investigation, and optimization.

To apply multiple Analytics filters to your data, follow these steps:

- Open Analytics in NiceLabel Control Center.
   Analytics displays your bar graph and list of label printing data.
- 2. To filter data from specific items, use Filters (on your right).
  - · You can select multiple filters at once.
  - Use the filter drop-down menus to select/deselect specific items.
  - · You can select single or multiple items for each filter.
- 3. Choose from the following filters:
  - · Print date
  - Printer
  - Printer group
  - · Label name
  - · Label dimension

- User
- Computer
- Module
- Metadata

Metadata is extra information about labels you print, stored in databases with print jobs. Metadata you assign does not appear on your labels, but you can use it for sorting, filtering, and other functions.

Filter your data using custom metadata tags you create for jobs in Automation. Metadata filter tags you type in Analytics are case sensitive and must exactly match your created tags to filter correctly.

Examples of metadata include:

- · Printer names
- User/system generated values
- · Data sources
- · Lot numbers

# **Example**

You define lot numbers for your labels in Automation (LotNumber=444, 445, 446, etc...). With Analytics in Control Center, you filter your data with the metadata tag "LotNumber=444" to analyze printing data for only lot number 444.

The metadata filter helps you analyze your print process for specific metadata tags you choose.

For more information on creating and applying metadata in Automation, see Automation User Guide Section 5.5 Setting Label And Printer Names From Input Data.

Analytics displays user printing data from this month on your graph and list by default.

- 4. To see data from another print date range, use the **Print date** filter (on your right).
  - Use the drop-down menu to select pre-defined date ranges.
  - Customize your print date range by entering dates in the From and To fields.
- 5. With your filters applied, you can view your filtered data by selecting tabs (on your left).
  - View filtered data on labels, printers, printer groups, users, computers/applications, or materials.
- 6. To hide your filters pane and view your graph and list unobstructed, click **Hide filters** (on your top right).
- 7. To remove your filters and return to your default data view click **Clear all filters** (on your top right).

Use Analytics to apply multiple filters to your printing data during date ranges you select. Use this data to investigate, analyze, and optimize your printing processes.

# 3.7.8. Optimizing printing processes with Analytics

Compare stated label needs with actual usage data to find savings and optimize production.

Use Analytics in NiceLabel Control Center to see production data and investigate efficiency. Compare how many labels you need with how many labels you print to analyze your label usage and losses, improve your printing processes, and find ways to decrease your printing costs.

## **Example**

You produce 1000 product units per month. For each unit produced, you need 1 label. This means your **label need** is 1000 labels per month (1000 units x 1 label per unit).

Now, use Analytics to see your usage data:

- 1. Open Analytics in NiceLabel Control Center
- 2. Click the Labels tab (on your left)
- 3. Use the **Print date** filter (on your right) to see data from **last month**

Analytics displays your bar graph and detailed list of user printing data.

From your graph, you see you printed 1100 labels last month, 100 more than you need.

Now you can investigate this difference between your label need and your usage data. Ask why you print more labels than you need and use the answers to find and decrease waste, errors, misprints, and malfeasance.

You can now use Analytics to view and analyze your usage data during print date ranges you select. Use this data to investigate, optimize production, and find ways to save by decreasing printing costs.

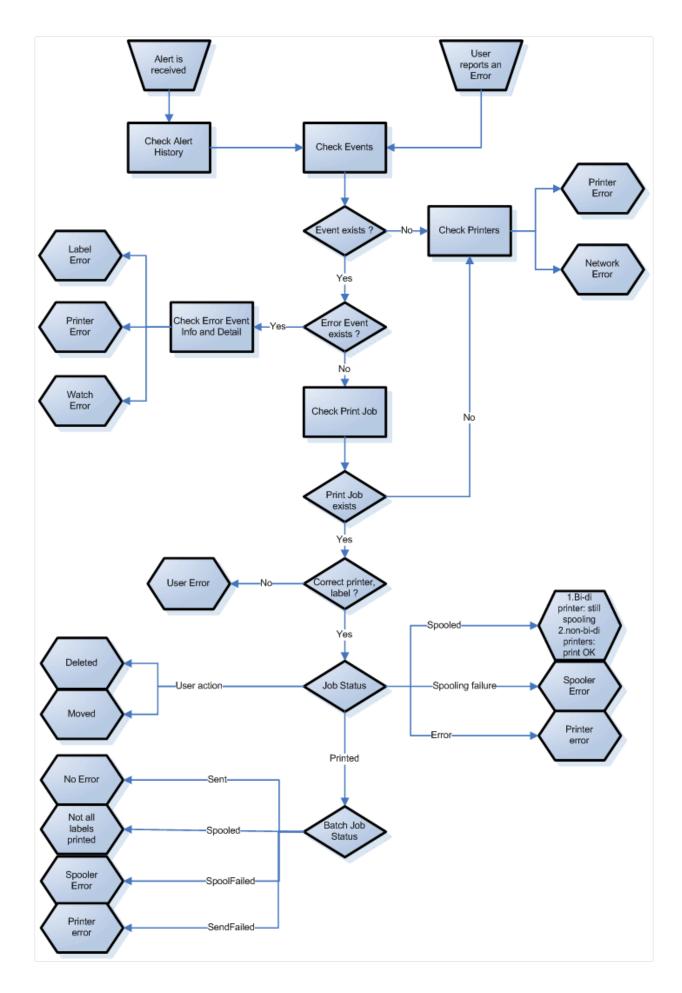
# 4. Technical Support

# 4.1. Problem Solving

Control Center provides an accurate status of your printing environment and proactive notification in case of imminent problems. When problem notification is received, either from a predefined alert or from a user, you can use the Control Center interface for finding and solving possible problems.

This section presents typical errors that you might encounter in your environment. Recommended steps are given that you (or your printing administrator) could take to solve the errors.

To find out if your printing environment has an error and to pinpoint the reason, please follow the problem resolution flowchart from top to bottom:



# 4.1.1. Possible problems

- 1. Error during printing: printing has been executed from labeling application, but the label is not printed.
- 2. Error on printing device: out of labels, out of ribbon, head open, etc.
- 3. Printer status: paused, off-line, printer turned off, etc.
- 4. Network error: networking cable not connected, networking infrastructure error, etc.
- 5. User error: printing the wrong label or to the wrong printing device.
- 6. User action: user deletes the print job from the spooler or NicePrintQueue, etc.

# 4.1.2. Steps for problem resolution

- 1. In case a user has reported a problem and alerts are in use, the Control Center administrator should first check the status of his alerts and alerts defined by other users (Alerts -> History).
- If an alert has been received, the administrator should click the Error Event link. If no alert has been received, the administrator should search for an Event of type Error (Events -> Errors).
   Error Event Log will open. Useful help here can be filtering and sorting feature of Control Center.
- 3. In the Error Event Log, details about error, workstation, date and time are shown, together with a link to that particular Event. In the Event Details window the administrator gets information about the module from which the printing has been issued, label details and possible links to other error events. Also, here is the Job Details link.
- 4. If there is no Error Event, (just an ordinary Event), the Job Details should be inspected about the Print Job status and separate label statuses (if several labels have been printed inside printing batch (for example if counter has been used).
- 5. If there was no Error Event, the printing device status should be inspected (Printing -> Print Queues -> Workstation)

Steps 1. to 4. can be used to track down possible problems 1., 5. or 6.

Step 5. can be used to track down possible problems 2., 3. or 4.

# 4.2. Online Support

You can find the latest builds, updates, workarounds for problems and Frequently Asked Questions (FAQ) on the product web site at www.nicelabel.com.

For more information, please refer to:

- Knowledge base: https://www.nicelabel.com/support/knowledge-base
- NiceLabel Support: https://www.nicelabel.com/support/technical-support
- NiceLabel Tutorials: https://www.nicelabel.com/learning-center/tutorials
- NiceLabel Forums: https://forums.nicelabel.com/



# **NOTE**

If you have a Service Maintenance Agreement (SMA), please contact the premium support as specified in the agreement.

# 5. Contact us

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