# NiceLabel Control Center 2019 User Guide

Cloud edition. Rev-2019-1 ©NiceLabel 2019.

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# 2 Introduction

## 2.1 Introduction

NiceLabel LMS is the enterprise solution for client/server based label printing and centralized systems management. 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.

## 2.2 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.

## 2.3 Typographical Conventions

Text that appears in **bold** refers to menu names and buttons.

Text that appears in *italic* refers to options, confirming actions like Read only and locations like Folder.

Text enclosed in <Less-Than and Greater-Than signs> refers to keys from the desktop PC keyboard such as `<Enter>`.

Variables are enclosed in [brackets].

NOTE: This is the style of a note.

**EXAMPLE:** This is the style of an example.

This is the style of a best practice.

WARNING: This is the style of a warning.

**TIP:** This is the style of a tip.

# 3 Configuration and Administration

## 3.1 Configuration

### 3.1.1 Changing Language Of The User Interface

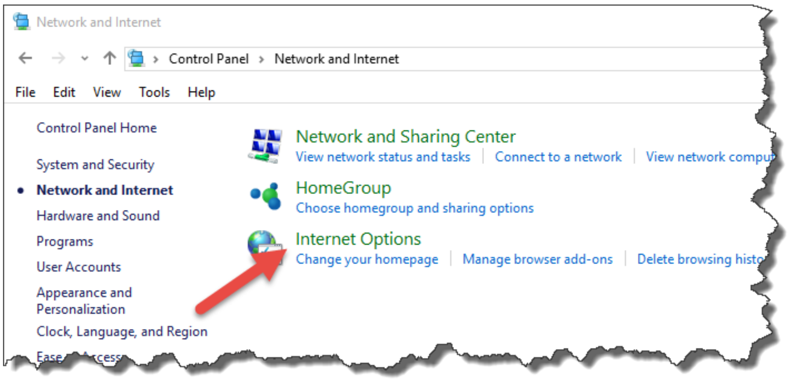
Control Center is a Web application and runs in a browser. To change the language in which the user interface is presented, change language preference of your browser. You can have multiple languages defined in your Windows preferences. The language at the top of the list is the primary language. Control 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.

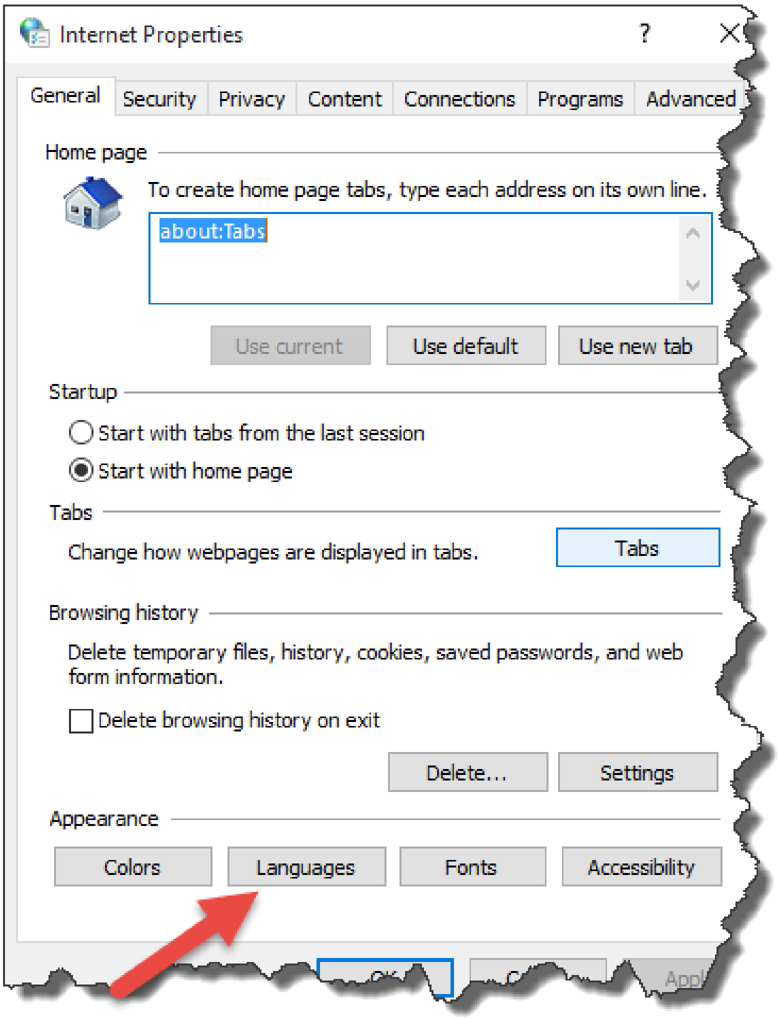
#### *3.1.1.1 Microsoft Internet Explorer And Microsoft Edge*

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

1. Open **Control Center**.
2. Select **Network and Internet > Internet Options**.

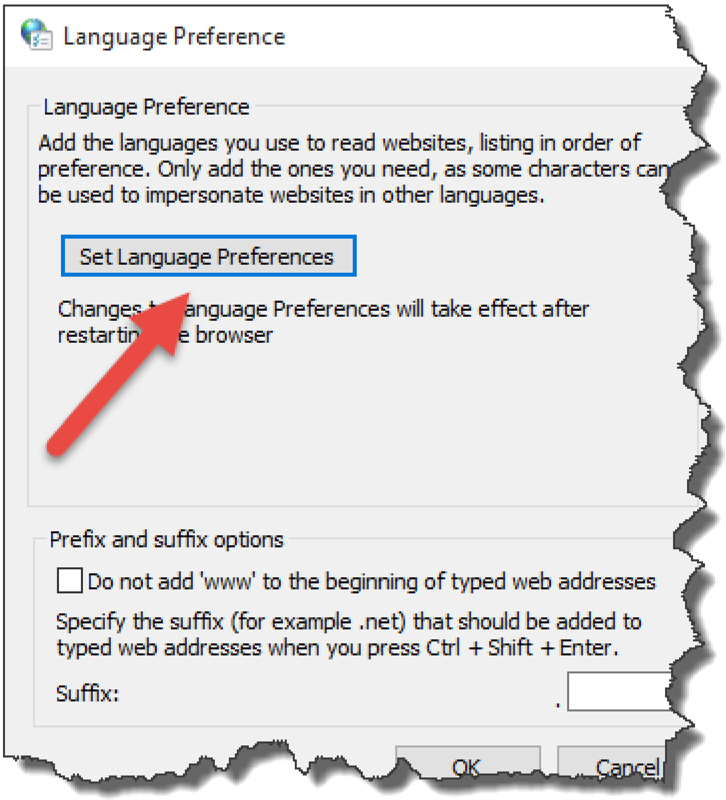



3. In **General** tab, click **Languages** button.



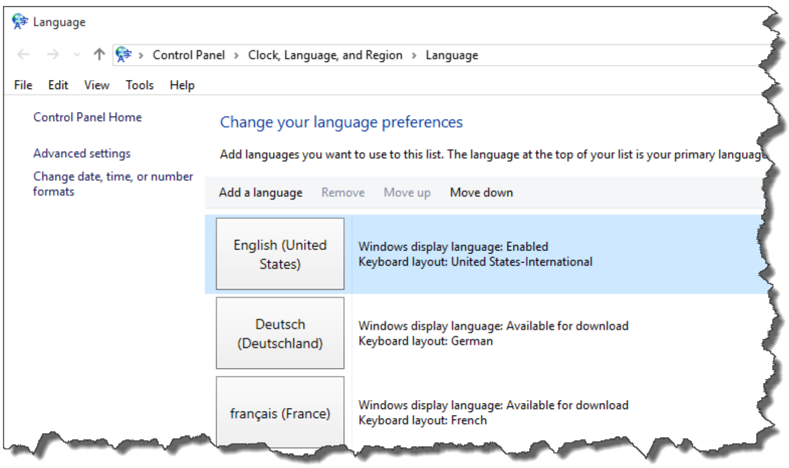

4. If you use Windows 10 or newer, click **Set Language Preferences** button.

   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.

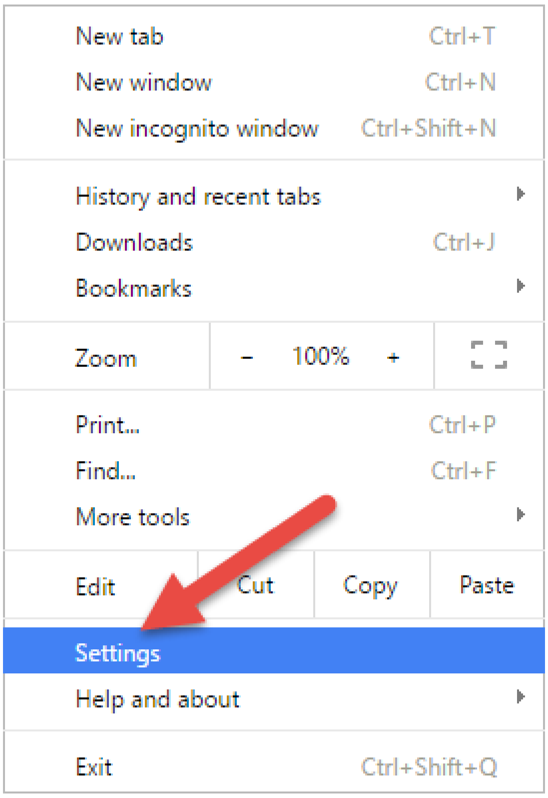



6. Close all dialog boxes.

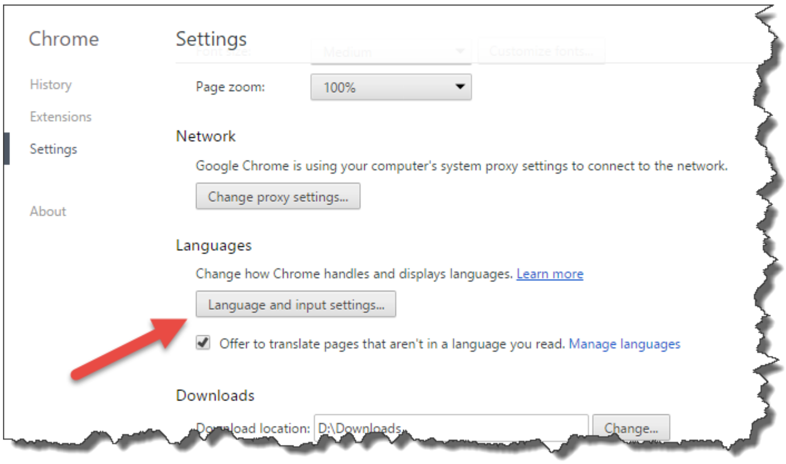
### 3.1.1.2 Google Chrome

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**.

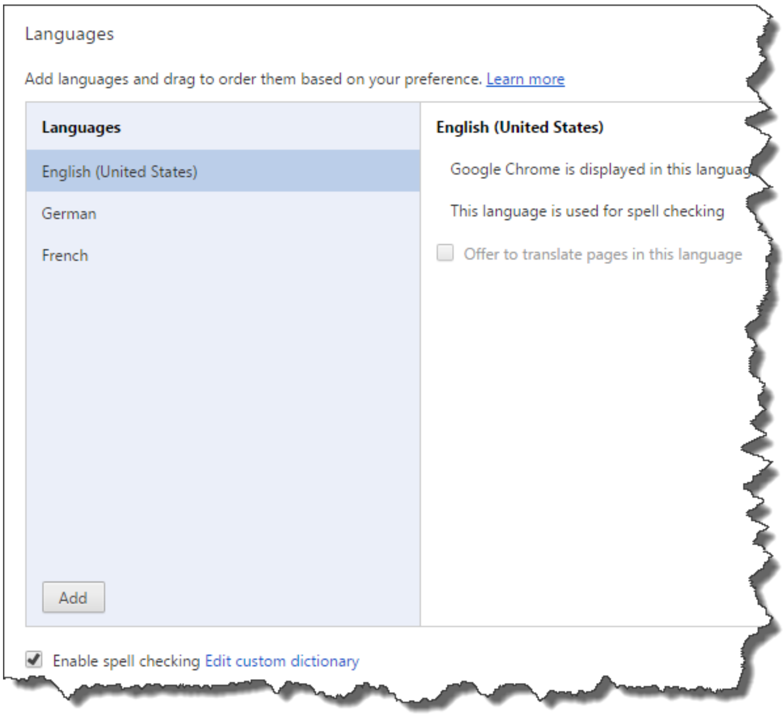



2. Click **Show advanced settings...** at the bottom of the window.
3. Scroll down and click **Language and input settings...** button.




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.

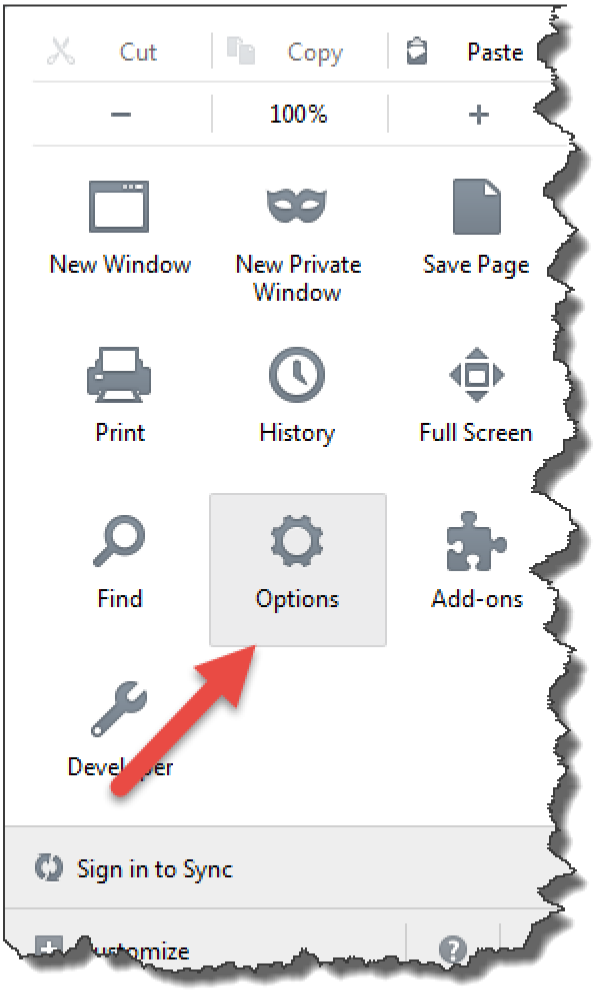



5. Click **Done**.

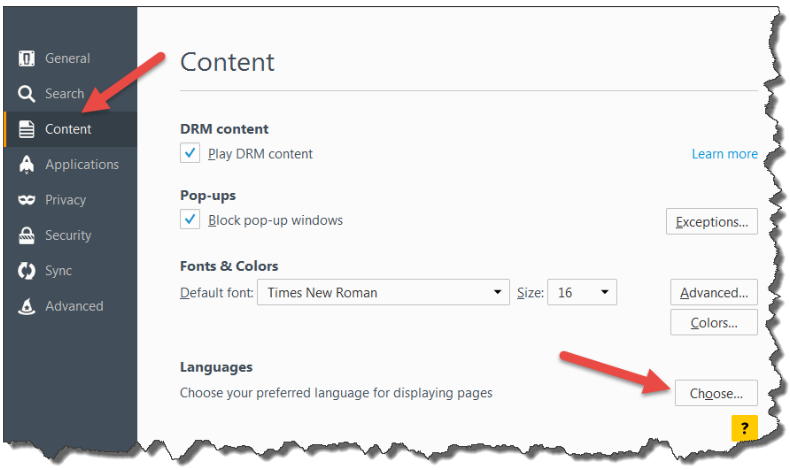
### 3.1.1.3 Mozilla Firefox

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**.

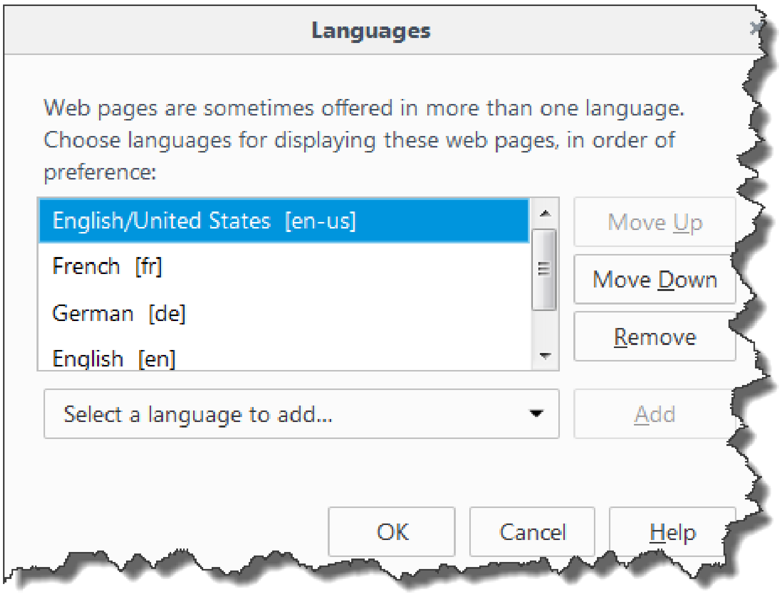



2. In **Content** menu, click **Choose** button in the **Languages** section.




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**.

## 3.1.2 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.

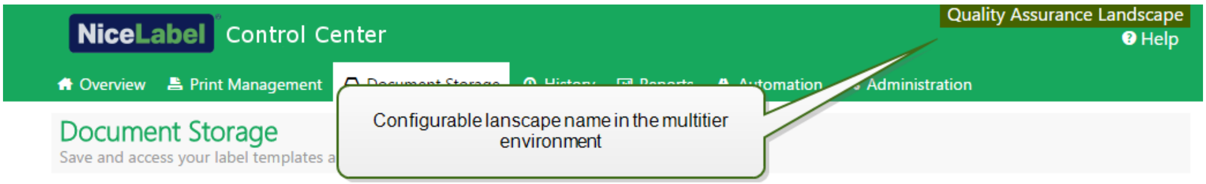
In such landscape model, the new labeling solutions are created and test-driven in Development and Quality Assurance / Testing environments before they are adopted in the Production environment. Usually a three tier landscape is adopted, or at least two tier landscape, where the roles of Development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

### *3.1.2.1 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 topic Synchronization.

### *3.1.2.2 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.
3. 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".

# 3.2 Administration

## 3.2.1 Users

### *3.2.1.1 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.

**TIP:** The functionality from this topic is available in Label Cloud Business and Label Cloud Unlimited.

#### *3.2.1.1.1 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.

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

##### *3.2.1.1.2 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.

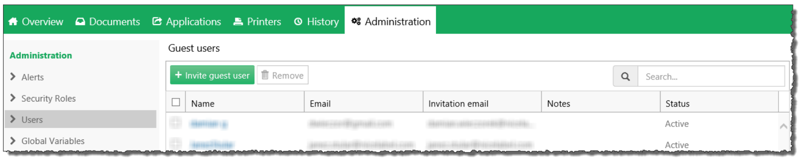
#### *3.2.1.2 Inviting Users Individually (Guest Users)*

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.

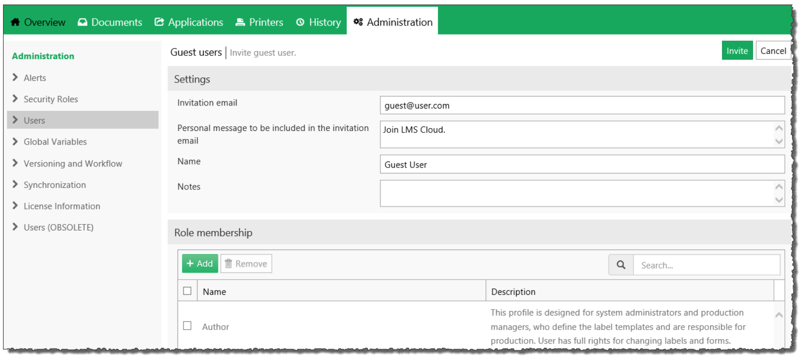
To individually invite users to your Label Cloud:

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 **Role membership**, you can assign the invited guest user an access role. Access roles allow you to control the user privileges in your Label Cloud.

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

   b. Click **Add**.

NOTE: 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.

5. Under **Web Applications**, you can immediately start sharing your label or solution documents from the cloud Control Center with the invited users.


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.

## 3.2.2 Managing User Privileges

**Access Roles** page implements your company's labeling system user policy. Access roles allow you to assign different sets of privileges to the users of your Control Center.

The first time you open the Access Roles page, it already includes a group of predefined (built-in) access roles.

- **Administration:** This role grants its members a full range of privileges on Control Center. Users with this access role can edit predefined roles, define custom roles and assign roles to users or groups.

  WARNING: Make sure you have at least one member user listed under the Administration access role before you enable or change the authentication types. This ensures you can log in as administrator and will not lock yourself out your Control Center. The local Administrator of the Windows system that hosts your Control Center is a member of Administration access role by default.

- **Approver:** Members of this role can review, approve or reject the labels or solutions in Document Storage.
- **Approver (second level):** This role is for users who review, approve or reject created documents during the second document approval step.
- **Author:** This role is for administrators and production managers who define label template layouts. Users with this role can edit labels and forms, and have control over label production.
- **Operator:** This role is for those who print labels. These users have read-only access to the Document Storage and therefore cannot change label templates or application configurations.

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

Read how to see and edit predefined access roles, or how to add new access roles in section Setting up Access Roles.

**EXAMPLE**

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

Annie needs access to the Reports page to prepare reports on printing consumables. Annie can belong to any predefined access role.

Charlie is a printing operator. He only runs solution files in runtime mode and prints labels. Charlie belongs to the Operators access role.

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

#### *3.2.2.1 Multiple Role Membership*

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

In case of membership in two access roles, the granted privileges from the first access role are more important than denied privileges in the second role.

**EXAMPLE:** User **Charlie** is a member of **Operator** and **Author** roles. Operator role grants him read-only access to Document Storage, while Author role grants him full access to Document Storage. His the overall document access is full.

### 3.2.3 Setting Up Access Roles

There are two ways to set up access roles in Control Center. You can edit predefined (built-in) access roles, or create custom access role from scratch.

- The predefined access roles are all editable. You can customize these roles to make them compliant with your company's specific policies or procedures.
- To keep the predefined roles and use additional customized roles for special use cases, add new access roles.

NOTE: To set up access role, log on to Control Center as an administrator.

NOTE: You cannot delete the predefined access roles.

1. Open the **access role** page. Go to **Administration > access role**.
2. You have two options:
    - To edit a predefined access role, click any of the listed roles.
    - To set up a new access role, click **Add+**.
3. The access role configuration page opens in both cases.
    a. **Settings** define the role's name and description. Make these and easy to differentiate from other roles. When editing a predefined access role, the **Settings** fields are already defined.
    b. Set the role **Status**. Set toggle switch to **Active** to make the role immediately available. **Suspended** status makes the role unavailable.

    NOTE: The predefined access role are always active. You can only change the **Status** of new roles that you create manually.

c. Set the **Privileges**. This is where you define which actions are available for members of access role. The privileges are organized in functional groups. Expand the listed groups of privileges to select or deselect them. If you are editing a predefined access role, the **Privileges** are already defined.

   These are the functional groups of Control Center privileges:

   - **Administration** grants all privileges on the Control Center. Members of Administration group can assign and change access roles, set up the authorization method, and edit privileges.

     > NOTE: To maintain administrative access to your Control Center, always make sure you are listed as a member of Administration role.

   - **NiceLabel applications** allows members to use NiceLabel (Designer, Print, or Automation)
   - **Control Center tasks** allows members to perform the listed Control Center tasks.

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 ready.

   > NOTE: If you delete a access role, keep in mind that its members lose the assigned privileges.

## 3.2.4 Versioning And Workflows

One of the main purposes of your Control Center is to serve as a document management system. If you click the **Documents** tab, you can find all your label and solution files, and the assets that allow you to perform labeling in your company.

Because the users constantly create and change the label and solution files, Control Center includes two built-in mechanisms:

- Versioning makes sure only approved versions of label and solution files are available to the end-users.

  > NOTE: In Control Center, the users with read-only rights are considered as the end-users.

- Workflows make sure the authorized users in your company 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 the Document Storage in your Control Center, go to **Administration > Versioning and Workflows** and click the **Enable** buttons.

NOTE: You can decide to separately enable Versioning and Workflows. Before you can use workflows, you must enable versioning first.

Details about versioning are available in section Revision Control System.

Details on how to apply the built-in or custom workflows are available in section Workflows

NOTE: By default, Versioning and Workflows are enabled.

### 3.2.4.1 Using Versioning

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

- Continuously work with revisions (versions) of your files. You no longer need to maintain multiple versions of files. With versioning, you have a single file with for which you see the entire revision history.
- Track changes. Revision history tells you exactly who makes the changes on the files and when. If combined with workflows, all the document approval steps are available.
- You can revert to previous revisions.
- You can visually compare the revisions.
- You can restore the deleted files.

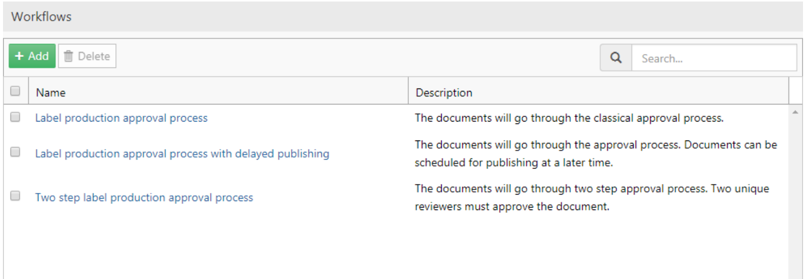
Details about versioning are available in section Revision Control System.

### 3.2.4.2 Applying Workflows

Workflow defines the sequence of steps that make the right file version in your Document Storage available for the target users. These can either be print operators, external partners, or any user who prints a label or runs a solution.

Your Control Center comes with three predefined 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. If you are a member of Administration access role, you can customize these three pre-built workflows.

You can apply the workflows on the level of folders in the Document Storage.

Details on how to apply the built-in or custom workflows are available in section Workflows

## 3.2.5 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.

NOTE: 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 NiceLabel Print, 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.

1. 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`

NOTE: 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.

## 3.2.6 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 an 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 NiceLabel Designer 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. NiceLabel Designer 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.

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

### *3.2.6.1 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.

## 3.2.7 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:

- **NiceLabel Designer errors during production:** if printing from NiceLabel 2019 Designer on a connected workstation reports an error, it raises an alert.
- **NiceLabel Print errors during production:** if printing from NiceLabel 2019 Print on a connected workstation reports an error, it raises an alert.
- **Automation errors during production:** if printing from NiceLabel 2019 Automation 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 fine-tune 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.

### *3.2.7.1 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]

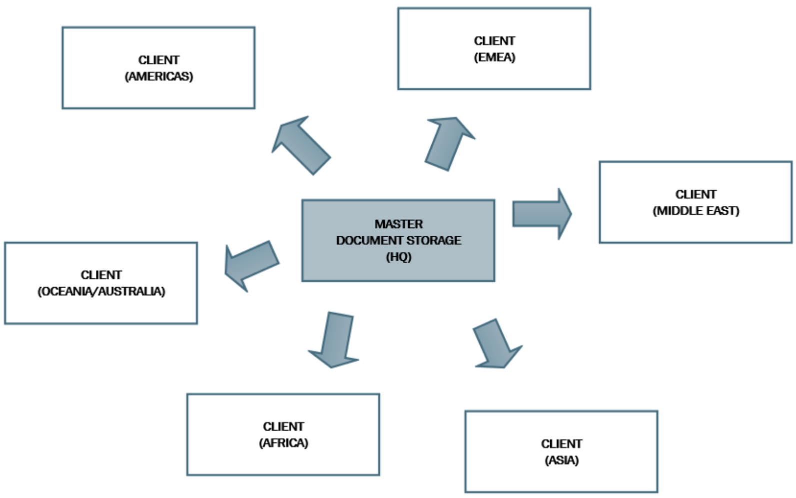
### 3.2.8 Synchronization

**TIP:** The functionality from this topic is available in Label Cloud Business and Label Cloud Unlimited.

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.



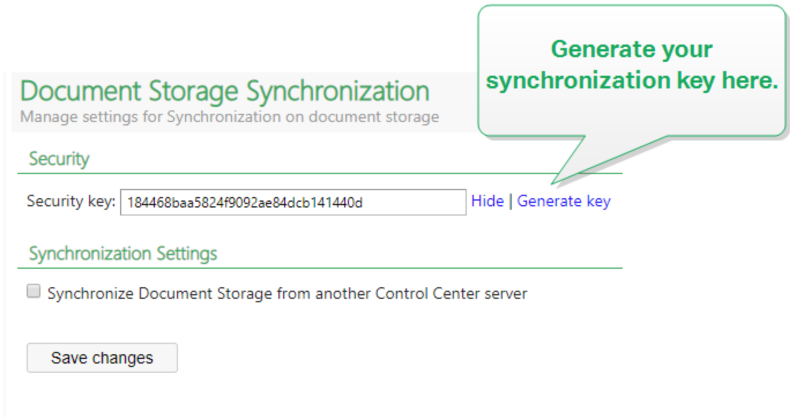

- **Synchronization of files of multiple stage deployments (development > test (Quality Assurance) > production).** In this case, the files must travel in the chain from the development towards the production environment. Control Center in the Development environment is master to Control Center in the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

NOTE: 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.

### *3.2.8.1 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.

### *3.2.8.2 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.

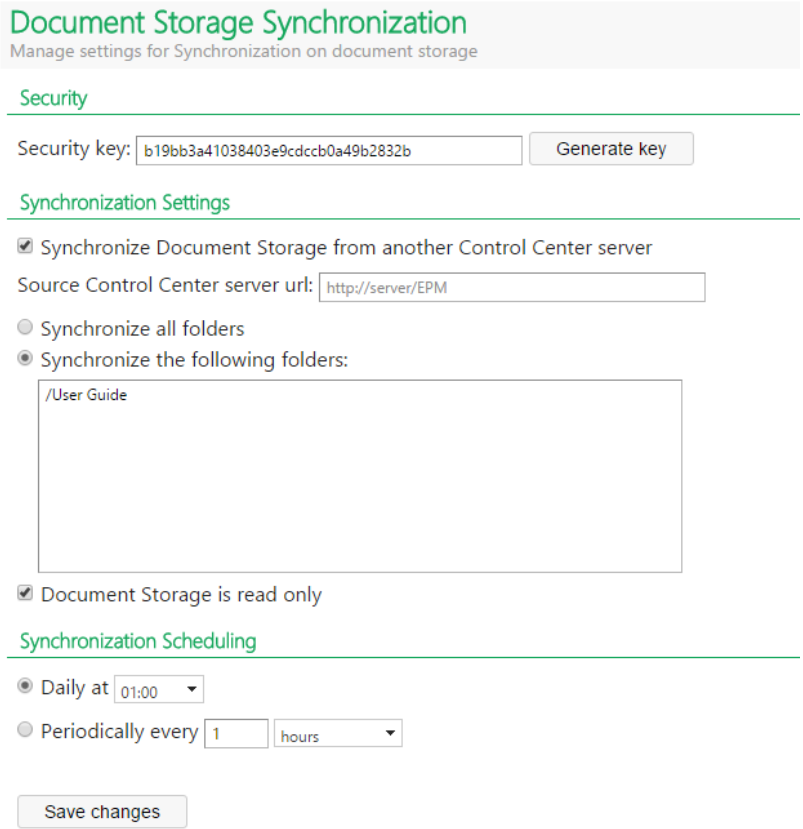
    > WARNING: Synchronized files always overwrite their locally modified copies.
7. Enter the URL to access the master Control Center.

    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 pre-defined value, or enter your own time.
- **Periodically.** The synchronization will occur periodically in defined time interval (minutes, hours or days).

9. Click **Save changes**.

### *3.2.8.3 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)

## 3.2.9 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.

**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.

- **Data retention** tells you how long the history log is available online.

**Labeling data storage** contains information about the cloud storage for your labeling assets.

- **Status** shows the creation date of your labeling data storage in the cloud.
- **Connection string example** shows you the connection string format for your labeling data storage in the cloud. To connect your NiceLabel clients to the labeling data storage, adapt the example connection string with your Label Cloud account user name and password.

# 4 Using Control Center

## 4.1 Opening the 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**

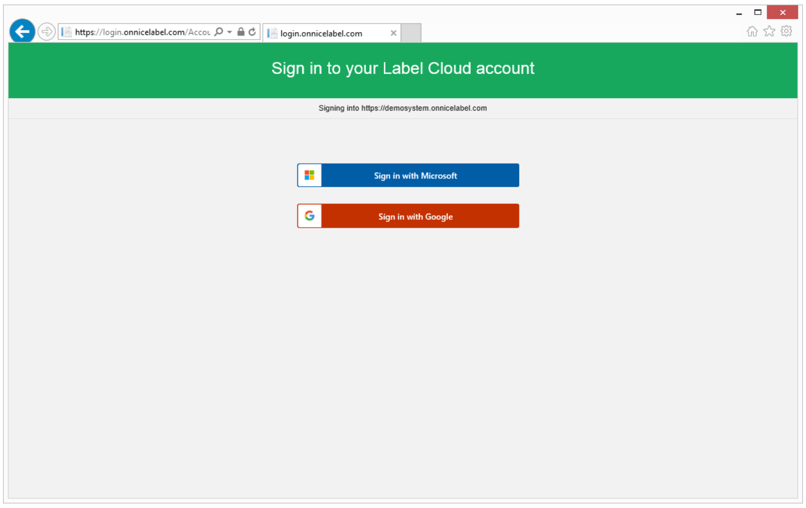
When signing in to Label Cloud for the first time, you have to activate your account first using the sign up procedure.

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

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

Complete these steps:

1. 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.



NOTE: 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:

1. 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.

2. Sign in with your Microsoft or Google account.

   NOTE: 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.

# 4.2 Overview

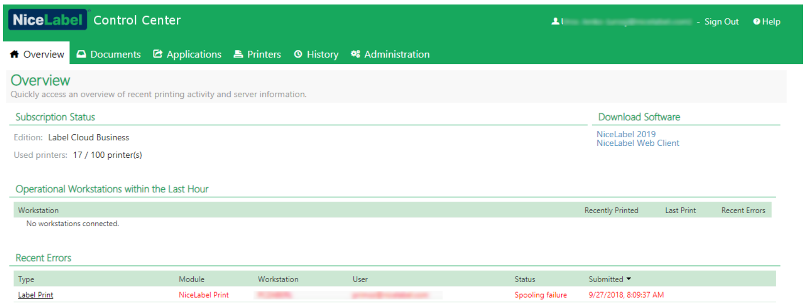
When you open the NiceLabel Control Center, the **Overview** page opens. It is s a summary page that displays the current system status:

- **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.

NOTE: 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 reported errors from the computers that are signed in to the Label Cloud.
- **Download Client.** Click the links to download and install NiceLabel 2019 and NiceLabel Web Client on your computer.



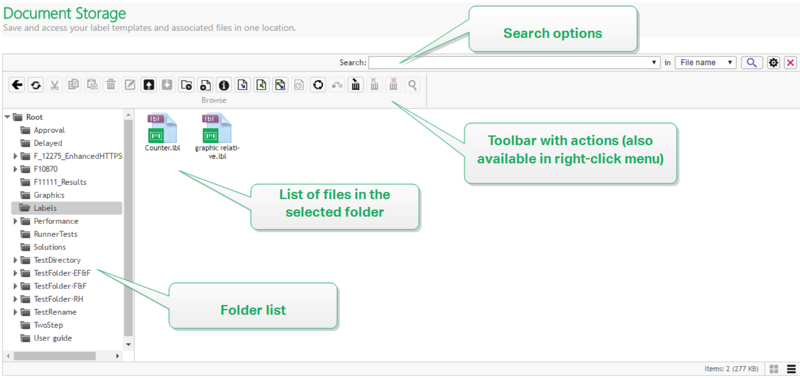

**PRODUCT LEVEL INFO:** NiceLabel Automation is available with Label Cloud Business and Label Cloud Unlimited editions.

# 4.3 Documents

## 4.3.1 Document Storage

Control Center includes the Document Storage feature, which is a shared file repository on the server, where 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.




NOTE: Availability of options shown on the screen shot depends on the Control Center product level.

## 4.3.1.1 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.

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 need NiceLabel LMS Enterprise product to enable support for revision control and workflows.

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.

## 4.3.1.2 Remembering The Last Viewed Folder

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.

### 4.3.1.3 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).

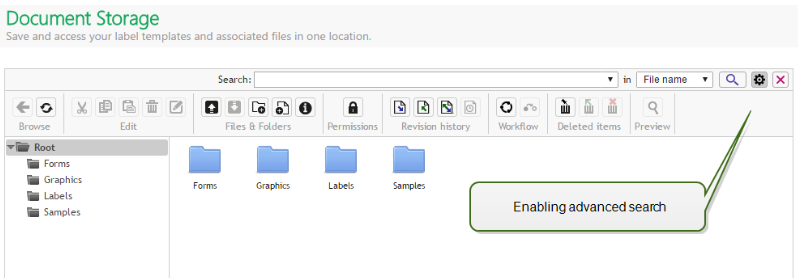
To clear the filter, click the **Clear search** button.

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"**.

### 4.3.1.4 Advanced Search

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:

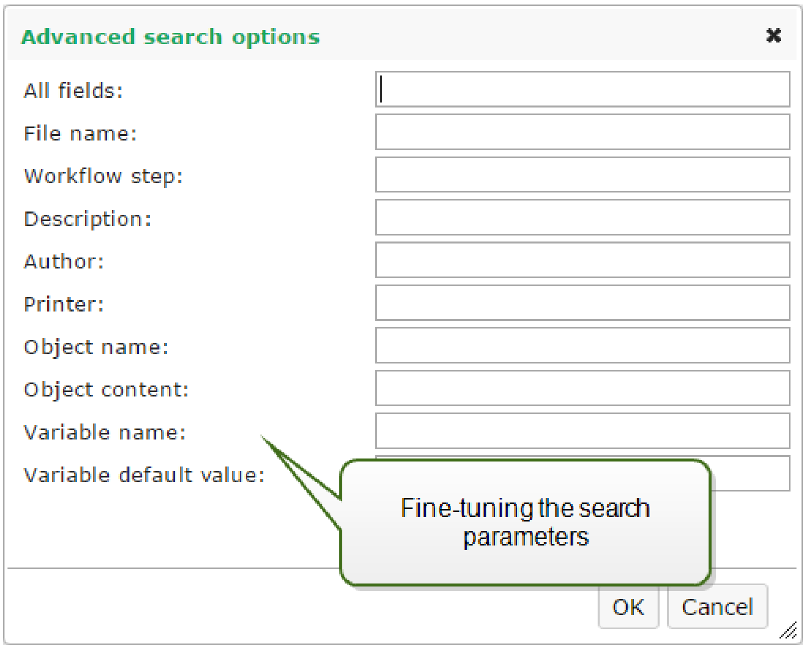
**EXAMPLE:** Name, Author, Description, PrinterName, PrinterDriver, Width, Height, WorkflowStep, Object, ObjectContent, Text, TextContent, TextFont, Barcode, BarcodeContent, BarcodeType, Graphic, GraphicPath, Variable, VariableDescription, VariableDefaultValue, VariablePrompt

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.



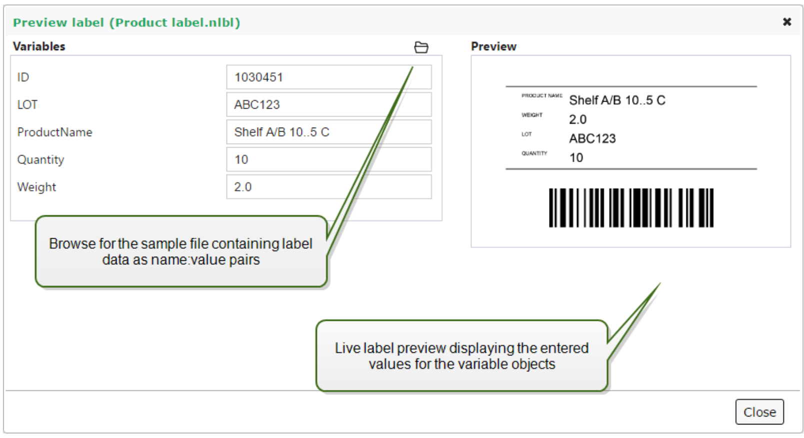

### 4.3.1.5 Previewing Labels

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.
2. Click the **Preview** button in the Toolbar.

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




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.

WARNING: When using Application authentication mode (NiceLabel users), the label preview is not available.

### *4.3.1.6 Applying Values From Data File To The 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.

```
<?xml version="1.0" encoding="utf-8"?>
<Variables>
    <variable name="Variable 1">Value 1</variable>
    <variable name="Variable 2">Value 2</variable>
    <variable name="Variable 3">Value 3</variable>
</Variables>
```

### 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 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 SampleValues.

   **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 SampleValues.

**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 trough all workflow steps.

### *4.3.1.7 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.

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

### *4.3.1.8 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.
2. Click the **Get info** button in the Toolbar.

   You can also right-click the file and select **Get info** in the context menu.

### *4.3.1.9 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 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**

WARNING: Direct interaction with the Document Storage requires authentication set to **Windows Authentication** or **None**. Files are not accessible from NiceLabel clients when you use **Application Authentication**. The WebDAV does not work with the Application Authentication.

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. The files are accessible using the WebDAV connection.

### 4.3.1.10 Using WebDAV Syntax To Open Files

You can use the following WebDAV syntax to open files:

```
\\<server>@8080\DavWWWRoot\folder\label.nlbl
```

For secure connection to Document Storage use the following WebDAV syntax:

```
\\<server>@SSL@8080\DavWWWRoot\folder\label.nlbl
```

### 4.3.1.11 Using HTTP Syntax To Open Files

You can use the following HTTP syntax to open files:

```
http://server:8080/folder/label.nlbl
```

For secure connection to Document Storage use the following syntax:

```
https://server:8080/folder/label.nlbl
```

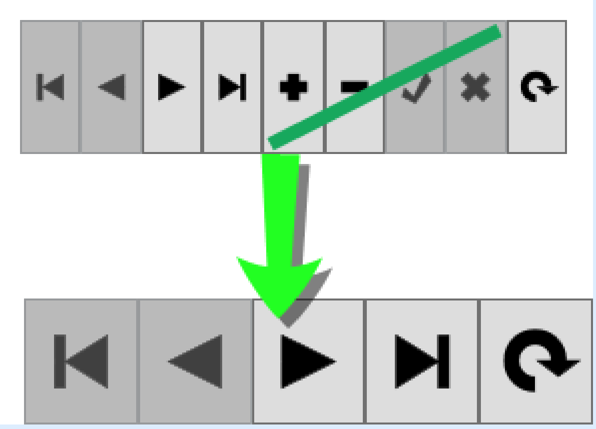
### 4.3.1.12 Accessing Database Files In Document Storage From Web Printing

The added web clients in Control Center may have assigned labels or solutions with connections to database files that are stored in Document Storage. Below described are a few specifics for database connections that use local Document Storage paths:

- Web Printing client may access the following database file types: Access (e.g. *.accdb, .*mdb), Excel (*.xlsx, *.xls) and text files (*.cvs, *.txt). OLE or ODBC databases are not accessible in Document Storage.

- Web Printing server makes a temporary copy of the database in `%temp%` folder, reads the requested data and returns it to the Web Printing client. Because the database request works with a temporary copy of the database file, database can be used only as a read-only data source for label or solution files that are in use via Web Printing client.

**EXAMPLE:** Relative path to database is in use. Database Navigator object connected to Access database appears without Add, Update and Delete record buttons.



NOTE: In cases of multiple database queries, server performance issues might appear due to frequent copying and erasing of the database files, or due to their large size.

NOTE: The described case applies only to the local Document Storage paths (e.g. `.\database.xlsx` or `/solutions/database.xlsx`). If you access the file from Document Storage via full URL address (i.e. `\\myserver@8080\DavWWWRoot\Solutions\database.xlsx` or `http://myserver:8080/Solutions/database.xlsx`), the path is not considered to be a local Document Storage path.

## 4.3.2 File Access Control

File access control allows you to define access permissions for individual folders. This is a useful option if you want to limit access to certain folders in Document Storage to a specific group of users. The access permissions are defined per folders and are valid for all files in that folder. The sets of access permissions are configurable per access roles and apply to all access role members.

To be able to configure file access permissions in Document Storage and to prevent users from accessing all files in the Document Storage, you must first enable login to Control Center. Enable Authentication first.

NOTE: If user login is not enabled in Control Center, the permissions of the **Default** role are in place – all Document Storage folders and files are accessible in full read & write mode.

#### *4.3.2.1 Access Control Rules*

These are the rules that define access control in the Document Storage.

- Access control is defined per folder by access roles. Members of each access role can either have full access (read & write), read access, or no access.
- You can define access permissions separately for each folder.
- All files within the folder inherit the access permissions as defined for that folder.
- Sub folders can either inherit permissions from the parent folder, or you can define custom permissions per each sub folder.
- Members of Administration access role are granted full access rights to all contents within the Document Storage.

#### *4.3.2.2 Additional Workflow Related Access Control Rules*

If a folder is governed by a specific workflow process, these are the additional rules:

- If you have read-only access to the folder, you can only retrieve the last approved-published revision. If the file hasn't been approved-published yet, you cannot access it at all. The access privileges are configured for access roles.

  > NOTE: The users in the production environments must have read-only access to ensure they can see only the approved-published revisions.

- When you have full access to the folder (read and write permissions), you can retrieve any file revision.

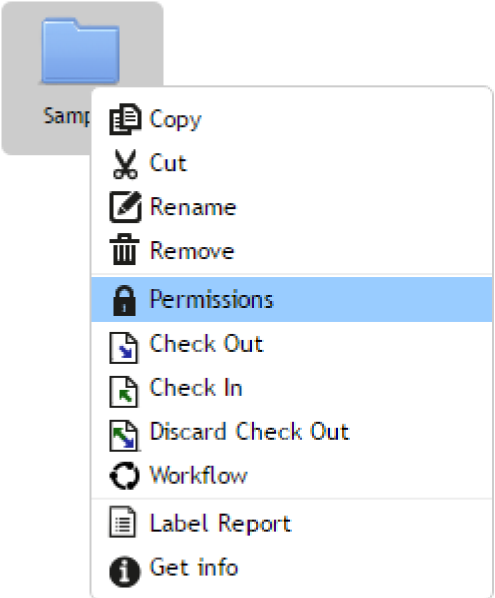
#### *4.3.2.3 Changing The Access Permissions For The Folder*

To change the access permissions for the selected folder, do the following:

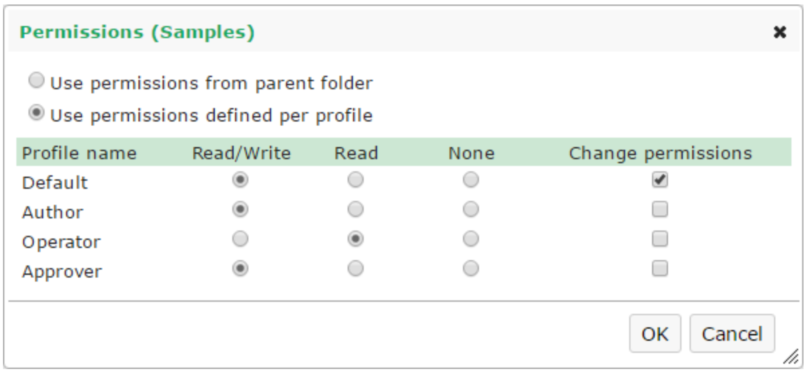
> NOTE: Make sure the user login is enabled in your Control Center.

1. Open Control Center and log in as a user with administrative permissions for Document Storage.
2. Go to **Documents**.
3. Select the folder for which you wish to change the access permissions.
4. Click the **Permissions** button in the toolbar. You can also right-click the folder and select **Permissions** from the right-click menu.

   The **Folder permissions** dialog opens for the selected folder.




5. Select **Use permissions defined per role**.
6. Select the access permissions you want to grant per access role. All users belonging to this role inherit the here defined settings.




7. Enable the **Change permissions** option if you want to enable the members of this role to change the access permissions for their role by themselves.

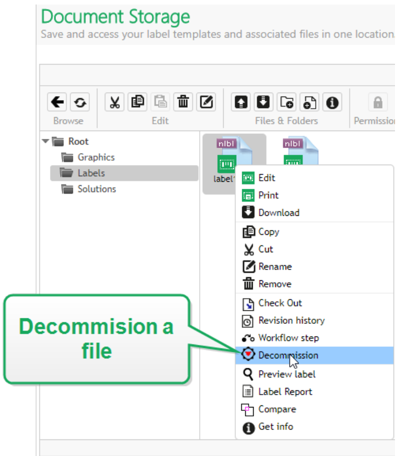
### *4.3.2.4 Specific Access Permission Options*

**TIP:** The functionality from this topic is 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.

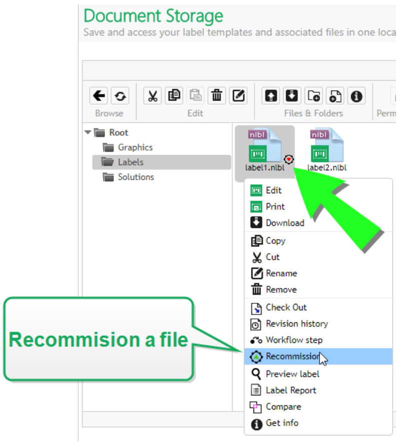
To decommission a file in the Document Storage, right click it to display the context menu and click **Decommission**. The confirmation window pops up. Click **OK** to continue.




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.

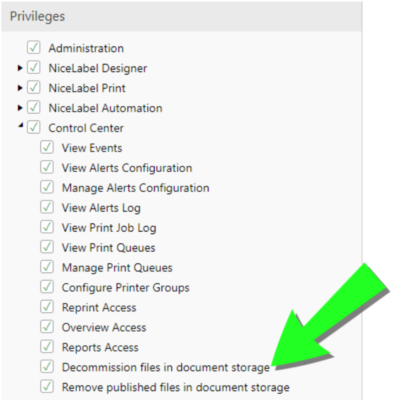
NOTE: You can decommission a file even if it is not currently published. This option is available also for files that are still in approval process or have been unpublished in the past.

If you decide to make the decommissioned file visible again, recommission it. Right-click it to display the context menu and click **Recommission**. The confirmation window pops up. Click **OK** to continue. The file is again visible to the members of access roles with read-only privileges.




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

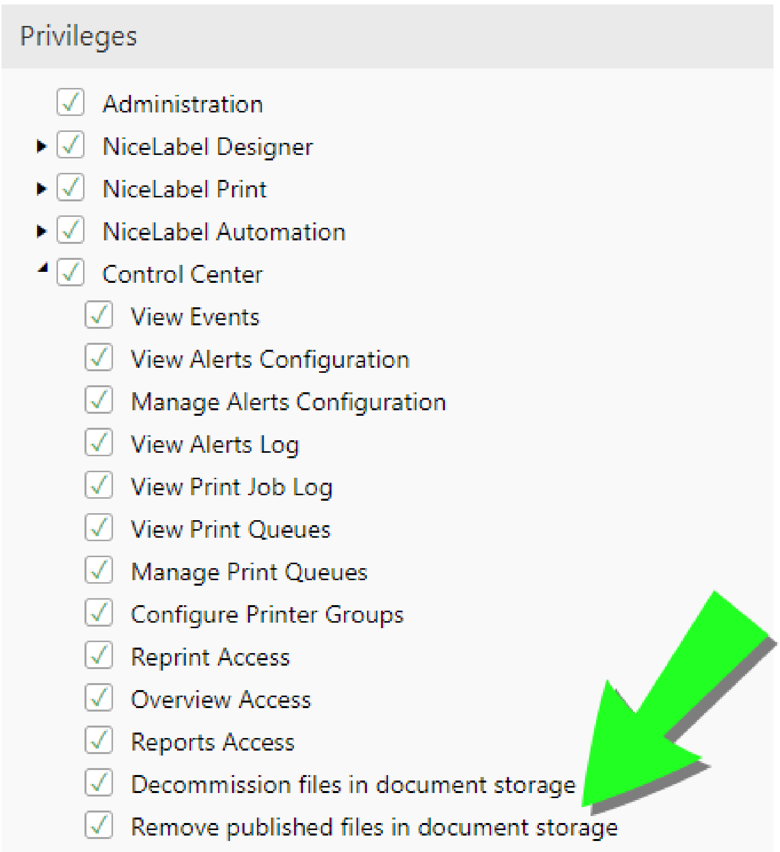
By default, members of Administrator and Approver access roles are allowed to decommission files. To allow other user roles to perform this action, go to **Administration > Access Roles >** select the access role **>Application Permissions > Control Center**. Scroll to **Decommission files in document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




### *4.3.2.5 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.

## 4.3.3 Label Report

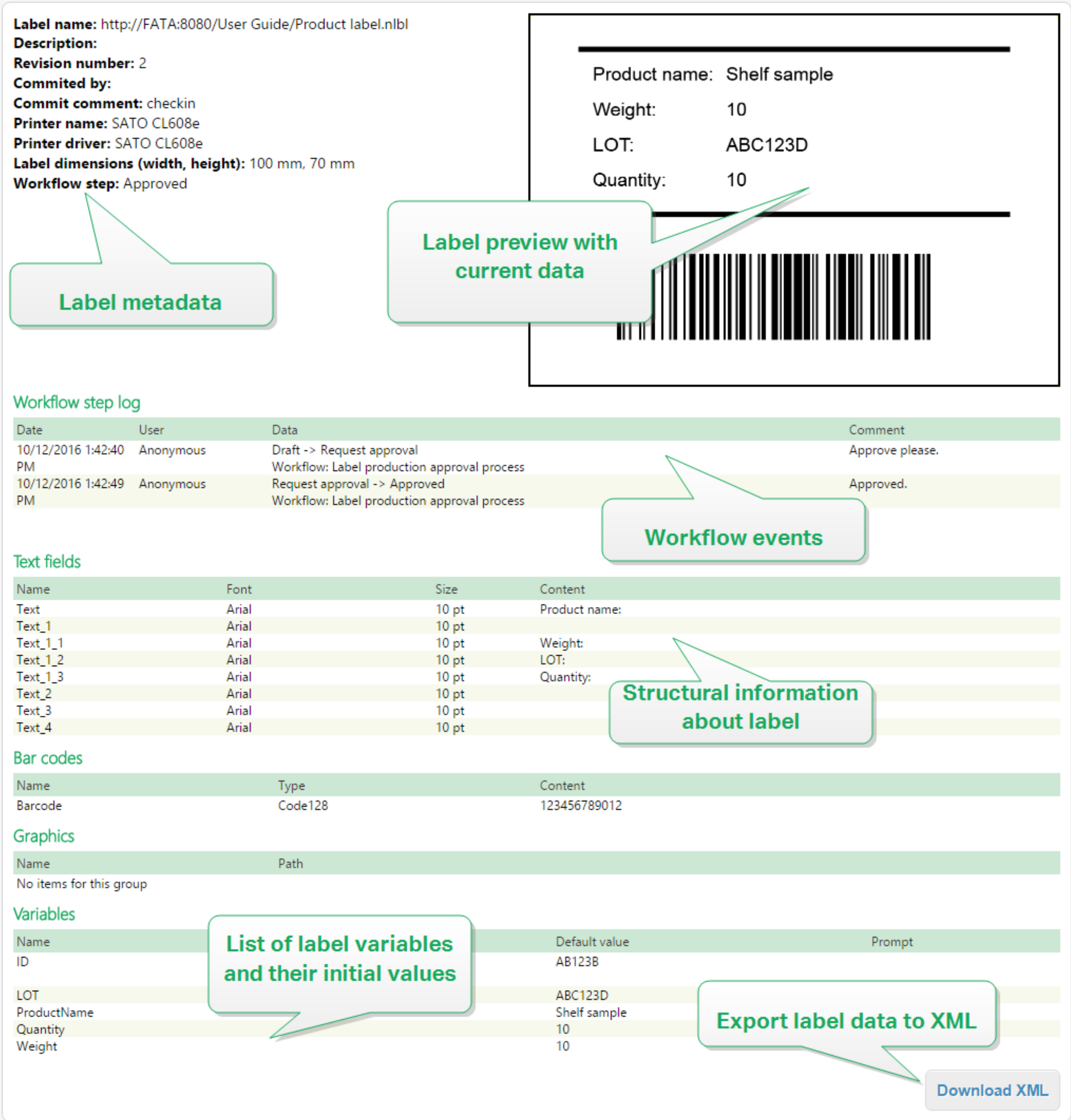
You can use label report feature to create a detailed description about the structure of the selected labels. At the same time, the label preview is generated for the visual reference on the label design.

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.



**Label name:** http://FATA:8080/User Guide/Product label.nlbl
**Description:**
**Revision number:** 2
**Commited by:**
**Commit comment:** checkin
**Printer name:** SATO CL608e
**Printer driver:** SATO CL608e
**Label dimensions (width, height):** 100 mm, 70 mm
**Workflow step:** Approved

Product name: Shelf sample
Weight: 10
LOT: ABC123D
Quantity: 10

Workflow step log

| Date | User | Data | Comment |
|---|---|---|---|
| 10/12/2016 1:42:40 PM | Anonymous | Draft -> Request approval<br>Workflow: Label production approval process | Approve please. |
| 10/12/2016 1:42:49 PM | Anonymous | Request approval -> Approved<br>Workflow: Label production approval process | Approved. |

Text fields

| Name | Font | Size | Content |
|---|---|---|---|
| Text | Arial | 10 pt | Product name: |
| Text_1 | Arial | 10 pt | |
| Text_1_1 | Arial | 10 pt | Weight: |
| Text_1_2 | Arial | 10 pt | LOT: |
| Text_1_3 | Arial | 10 pt | Quantity: |
| Text_2 | Arial | 10 pt | |
| Text_3 | Arial | 10 pt | |
| Text_4 | Arial | 10 pt | |

Bar codes

| Name | Type | Content |
|---|---|---|
| Barcode | Code128 | 123456789012 |

Graphics

| Name | Path |
|---|---|
| No items for this group | |

Variables

| Name | Default value | Prompt |
|---|---|---|
| ID | AB123B | |
| LOT | ABC123D | |
| ProductName | Shelf sample | |
| Quantity | 10 | |
| Weight | 10 | |

Download XML

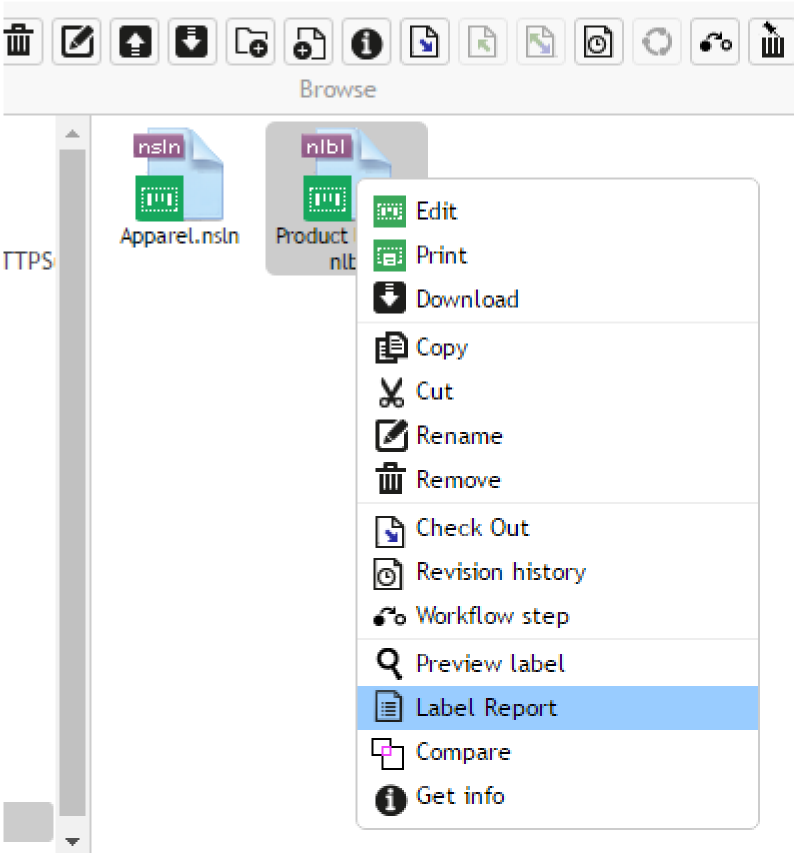


### *4.3.3.1 Executing The Label Report*

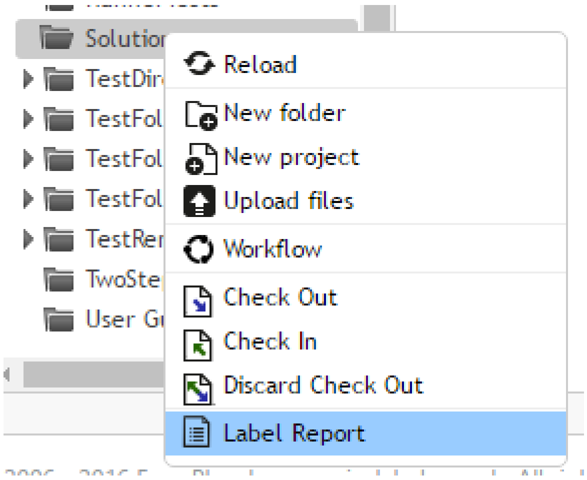
You can invoke the label report from several locations within the user interface:

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.

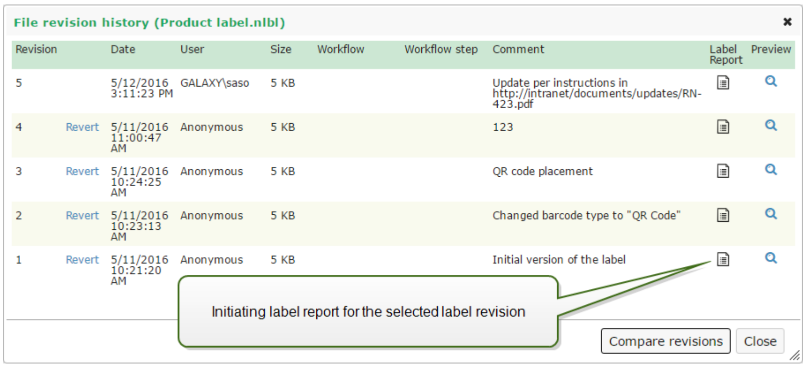
   To select several files click and hold `Ctrl` key while selecting files.




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.




### 4.3.3.2 Label Report Contents

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

**Label meta-data**

- Label name
- 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.

## 4.3.4 Comparing Label Files

**TIP:** The functionality from this topic is 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 check-in 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.

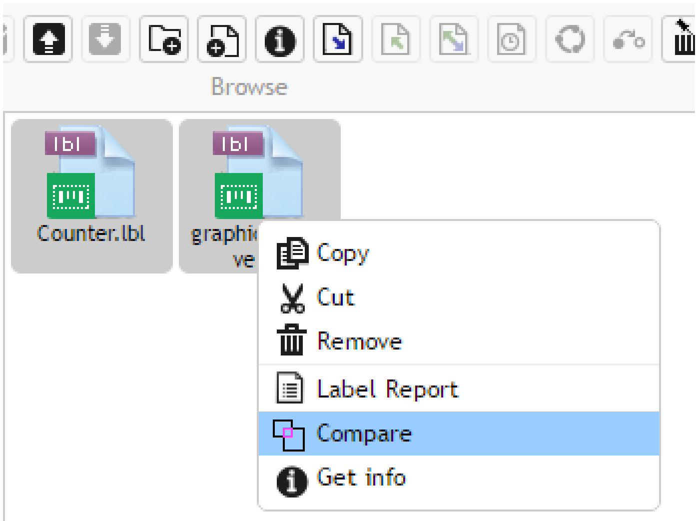

### 4.3.4.1 Comparing Different Label Files

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**.

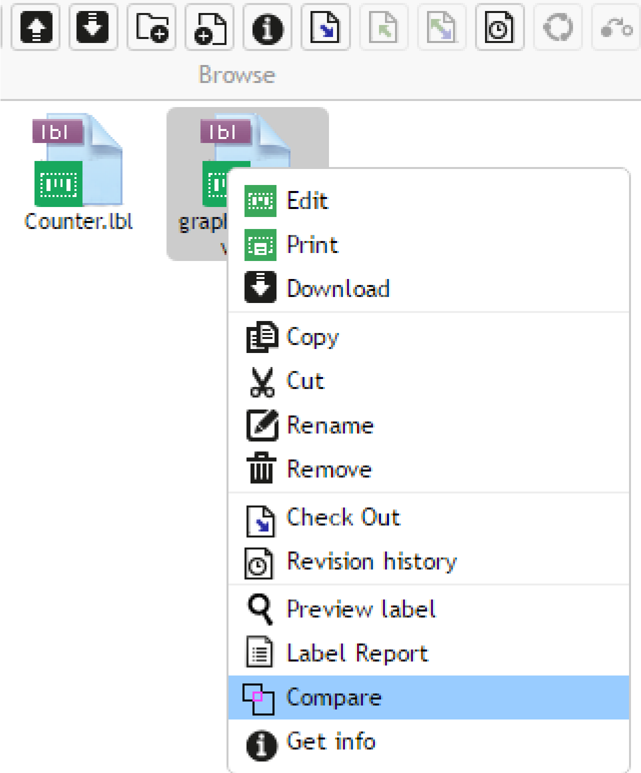



3. Select the left and right label for comparison. The superimposed image of label differences will be shown below the preview of the two selected labels.

#### *4.3.4.2 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.

### *4.3.4.3 Applying Values From Data File To The 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.

```
<?xml version="1.0" encoding="utf-8"?>
<Variables>
    <variable name="Variable 1">Value 1</variable>
    <variable name="Variable 2">Value 2</variable>
    <variable name="Variable 3">Value 3</variable>
</Variables>
```

### 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 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 SampleValues.

   **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 SampleValues.

**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 trough all workflow steps.

## 4.3.5 Revision Control System

**TIP:** The functionality from this topic is 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.

### *4.3.5.1 Adding Files To Document Storage*

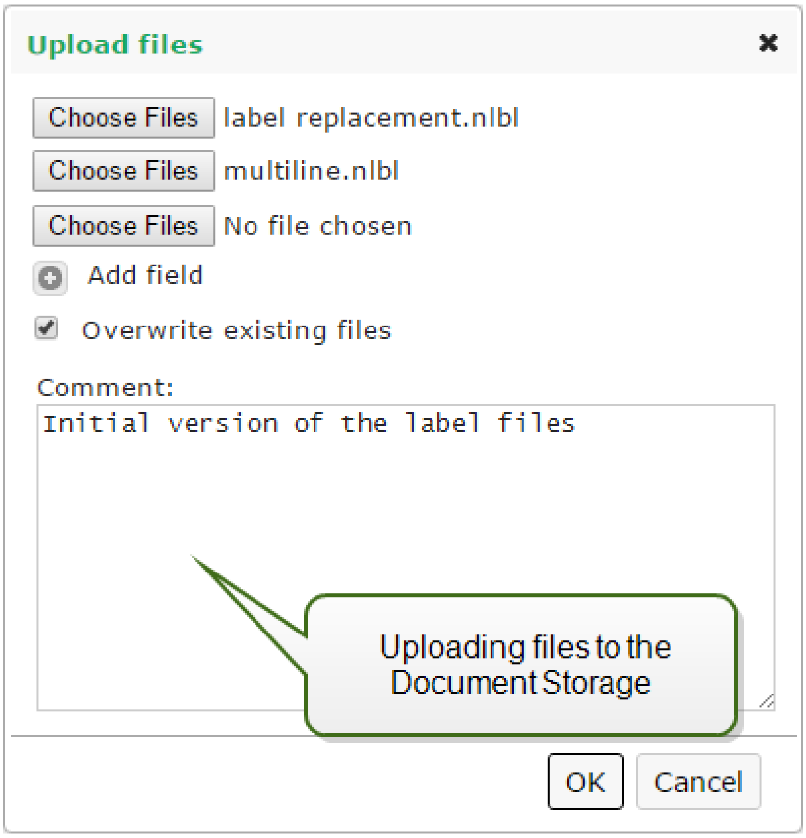
You must add the file into Document Storage to make it available for users.

To add a file, do the following.

1. Click the **Upload files** button in the Toolbar.
2. Browse to the files you want to add.
3. Click **Add field** if you want to add more than three files simultaneously.

   NOTE: If you use Internet Explorer 10 or above, Chrome or Firefox browser, you can select multiple files in the Browse dialog box. Use the standard Windows shortcuts with Ctrl key to select individual files, or with Shift key to select range of files.

4. Enter the optional **Comment**. The Comment is recorded to the file log.




### 4.3.5.2 Checking Out Files

Before you can start editing the file, you have to check it out from Document Storage. The checked-out 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.
2. 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.

### *4.3.5.3 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. 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.

### *4.3.5.4 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.

### *4.3.5.5 Checking In Multiple Files*

Use the standard Windows shortcuts with <Ctrl> key to select individual files, or with Shift key to select range of files. When you click the **Check In** button, all selected files will be checked in simultaneously. You can also select **Check In** command, while you have a folder selected. In this case all checked out files in the folder will be checked in. The comment you enter for the revision change will be applied to all files.

If an error happens during the processing, the user is informed about the details, such as files opened in designer, file check out was discarded, file was deleted.

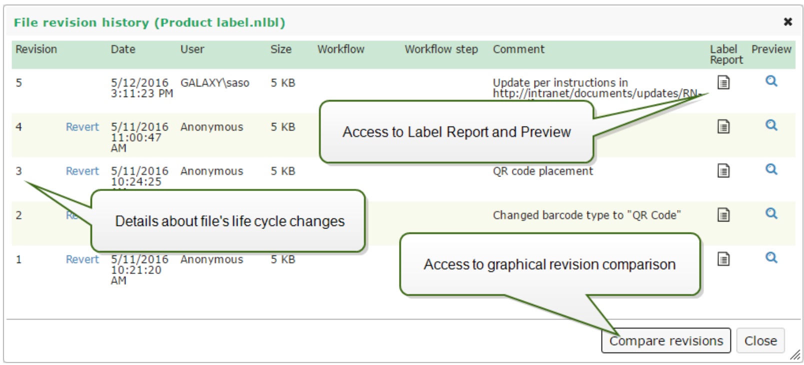
NOTE: The availability of the files depends on the configuration . For example, when you also enable workflows, the checked-in file is only available to print operators, when it is in the **Approved/Published** state.

### *4.3.5.6 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.

1. Select the file.
2. Click the **Revision History** button in the Toolbar.
3. The dialog box will display 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.

   - **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.
   - **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.

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

### 4.3.5.7 Requesting Label Revisions

The label files stored inside the Document Storage are accessible using 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 (so you are a designer), you will get the last revision.
- If you have read-only access to the file (so 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
```

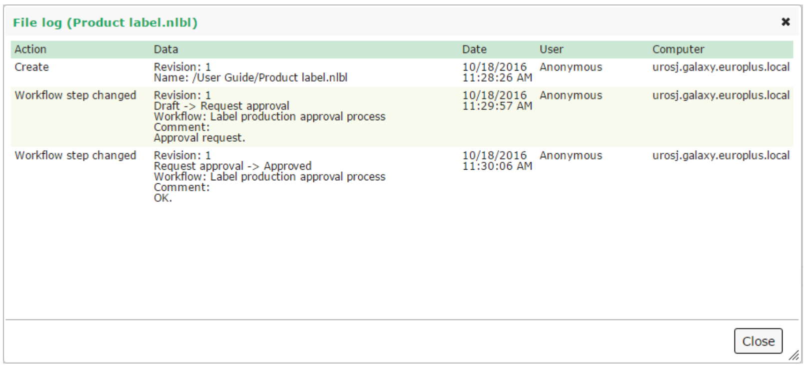
If no file revision has been approved, the failure will be reported in the error message.

**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:

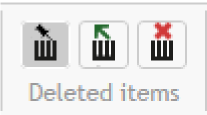
1. Select the file.
2. Click **Get info** button in the Toolbar.
   You can also right-click the file and select **Get info** in the context menu.
3. Click **View file log**.




### 4.3.5.8 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.

## 4.3.6 Workflows

**TIP:** The functionality from this topic is available in **NiceLabel LMS Enterprise**.

Control Center allows you to enable workflows next to the revision control system (versioning). Workflows allow you to enable another level of quality control in the label printing process. A workflow consists of a sequence of connected steps, which are controlled by the workflow logic. There might be one or more possible promotion steps from the current step. Every workflow has a starting step and the final step. Using a workflow, you can track the status of the label file.

If a folder is governed by a selected workflow process, the access privileges of the user requesting a label determine which revision will be returned in a response. For more information, see topic File Access Control.

### *4.3.6.1 Approval Process*

Approval steps are based on the selected workflow type. The hierarchy of the steps and allowable next steps are predefined for each workflow.

When the file is uploaded in the Document Storage in the workflow-enabled folder, its initial state is **Draft**. After the designer (author) is confident about the file layout and content, he moves the file into the next step **Request approval**. If configured, the responsible approvers are notified by an email that the file needs a review. The approver can either **Reject** the file. This notifies the designer that changes are needed. Or the approve it – this moves the file into **Approved** step. Each workflow defines the available step and transitions from one step to another.

Changing the step into **Approved** might require the user to provide his login credentials again. This re-authentication action confirms there is still the right user logged into the terminal. The Two step label production approval process has this re-authentication built-in.

The step **Approved** (or **Published** in some workflows) is the final state for the file. Labels cannot be used in the production, until they are approved and published. The members of **Operator** group (or any user with print-only permissions) can only see the files that are in **Approved/Published** step. The designer (author) can start working on the new revision of the label file, but the file will not be visible to print-only users until the new revision reaches the **Approved** state.

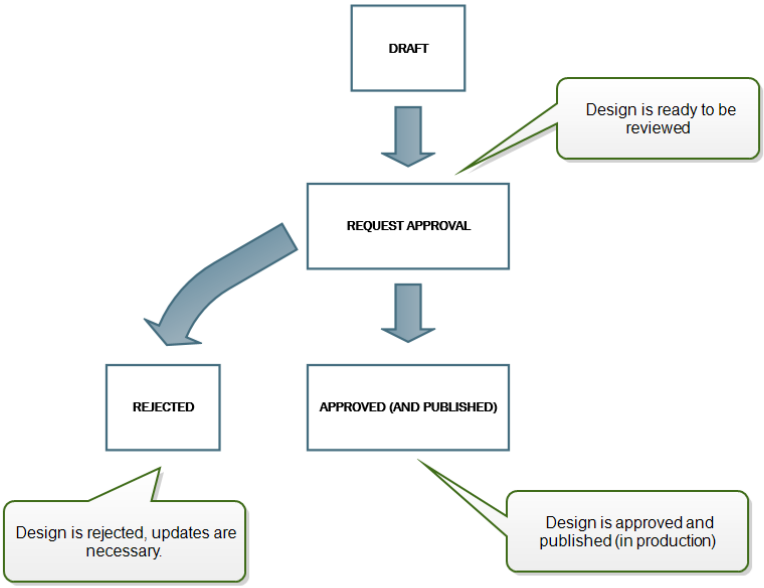
> NOTE: When approved/published, the file becomes visible to print operators (print-only users), members of the **Operator** access role.

### *4.3.6.2 Label Production Approval Process*

This workflow enables the standard approval process. First, the document is in the draft state. When ready, the designer requests for document approval. A person with approval permissions either approves the document or rejects it. If the document is rejected, the designer can open it in editor and update it. When the document is approved, it is automatically published.

The published documents are available to print operators. Such users have print-only permissions and will only be able to use the latest approved (and published) document. There might be other revisions in the Document Storage, but invisible to print operators.

Each change of the workflow step is documented in the system. The user performing the state change must enter the mandatory comment.




### 4.3.6.3 Two-step Label Production Approval Process

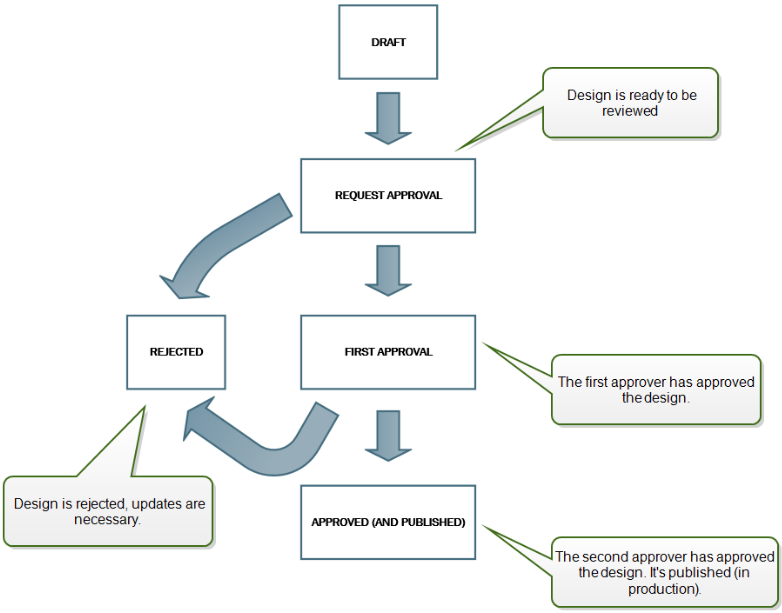
This workflow is similar to the **Label production approval process** workflow with a single difference. This workflow enables the two-level approval process. Before the document is approved (and published), two independent approvers must review the document and both approve it. Only after the document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



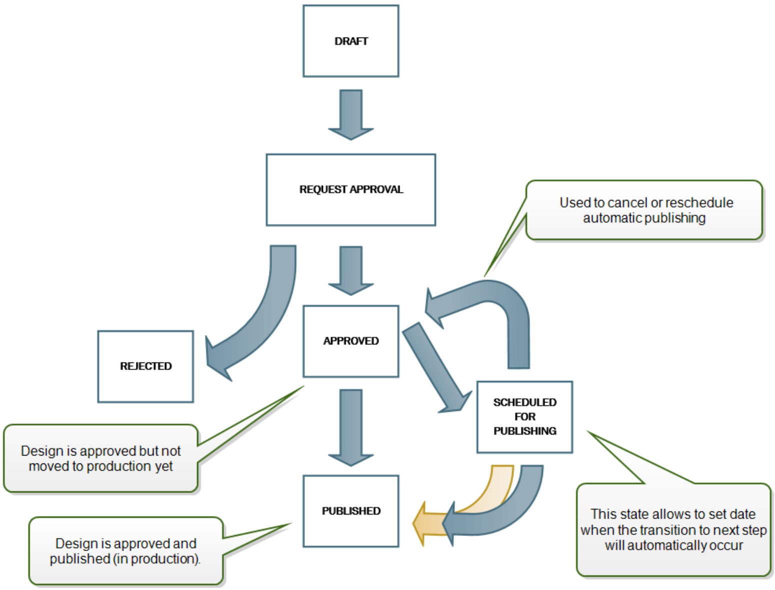

### 4.3.6.4 Label Production Approval Process With Delayed Publishing

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.



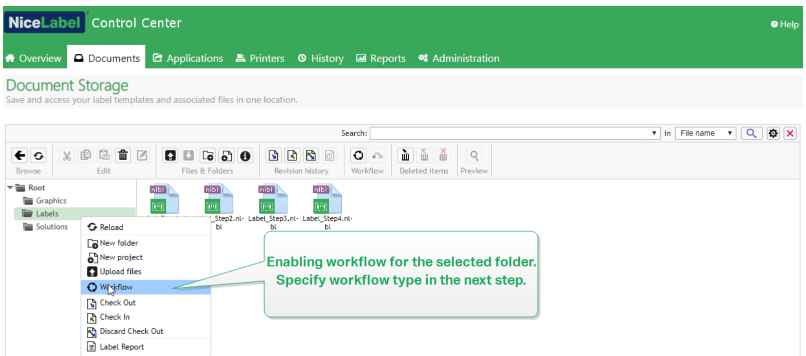

### 4.3.6.5 Enabling Workflows

To enable workflows, do the following:

1. 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.


5. Click the **Workflow** button in the Toolbar:

   You can also right-click the folder and select **Workflow** in the context menu.

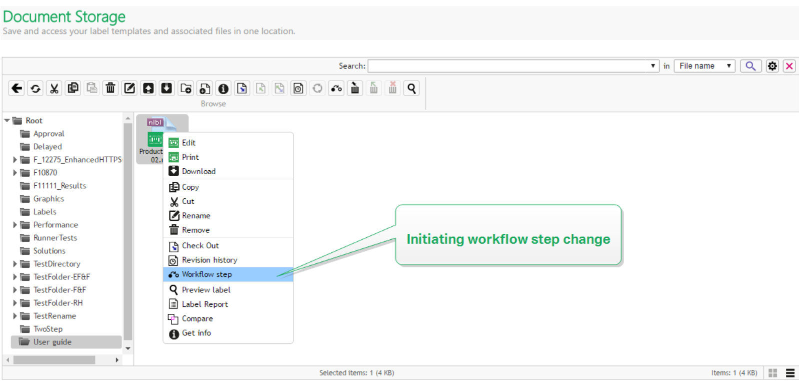


6. Select the option you want to enable for the folder.

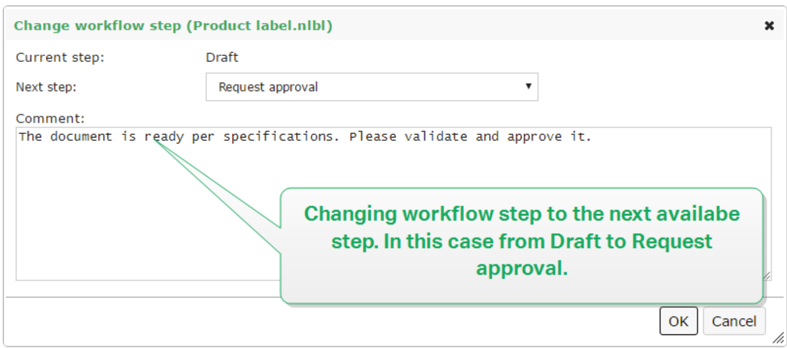
   - **Use workflow from parent folder.** Select this option if the parent folder has defined the same workflow that you intend to use. The workflow logic is inherited from the parent folder. When you change the workflow on the parent folder, the change will propagate to the current folder as well.
   - **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.

### *4.3.6.6 Assigning Workflow Steps To Files*

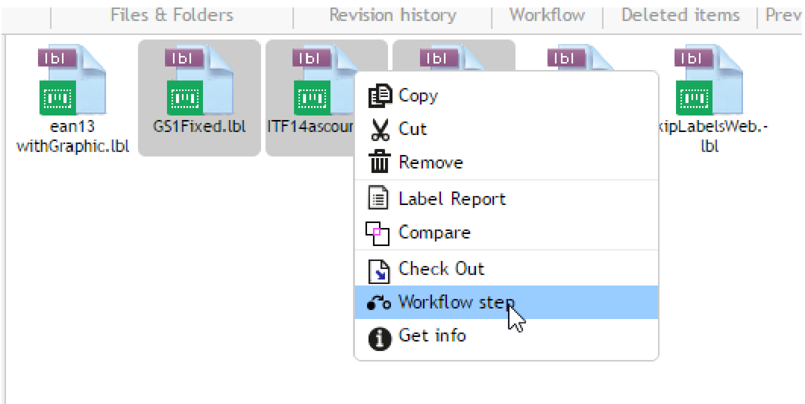
Each file in the workflow-controlled folder is on a certain step. The workflow step identifies in which workflow stage the file is currently in.




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.

**TIP:** Such use is intended for solution development and testing.

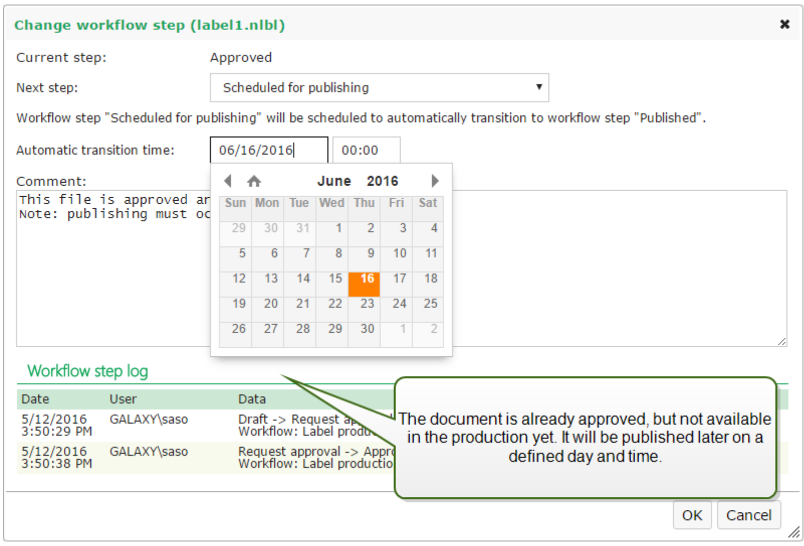
### *4.3.6.7 Delayed Approved File Publishing (Scheduled Publishing)*

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

1. 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.




7. Enter **the comment**.
8. Click **OK**.

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

### *4.3.6.8 Limiting Approving Privileges To The Selected Folders*

Only users that are members of the **Approver** access role can execute the approval process. They can change the workflow step from **Request approval** to either **Approved** or **Rejected** (or any other step defined for the selected workflow). Besides being member of the Approver access role, the users must also have access permissions to the files inside Document Storage.

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 **Security 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.
11. 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**.

    > NOTE: The **Permissions** option is only visible with enabled login.

16. 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.

### *4.3.6.9 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.

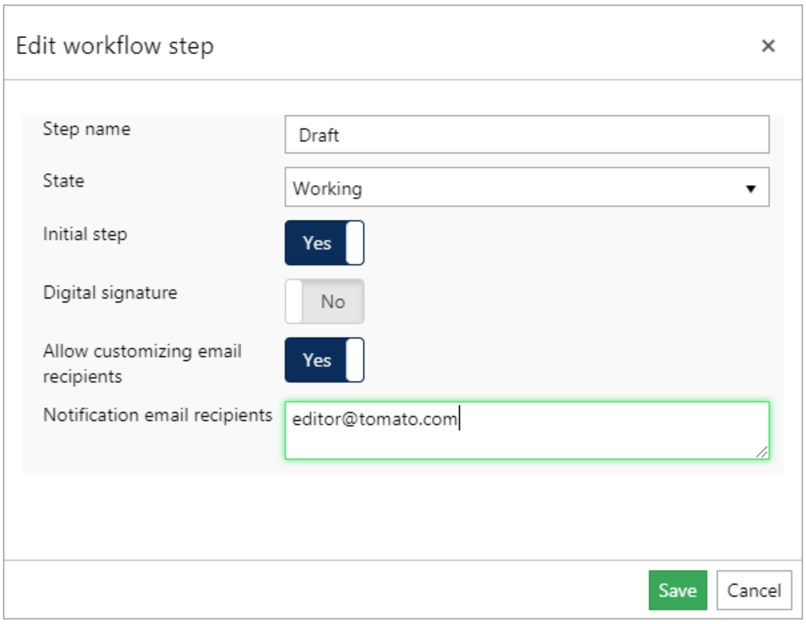
1. To create a new workflow, go to **Administration > Versioning and Workflows > Workflows**.
2. If you are adding a new custom workflow, click **+Add**. The editing window for a new workflow opens.

   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)**.

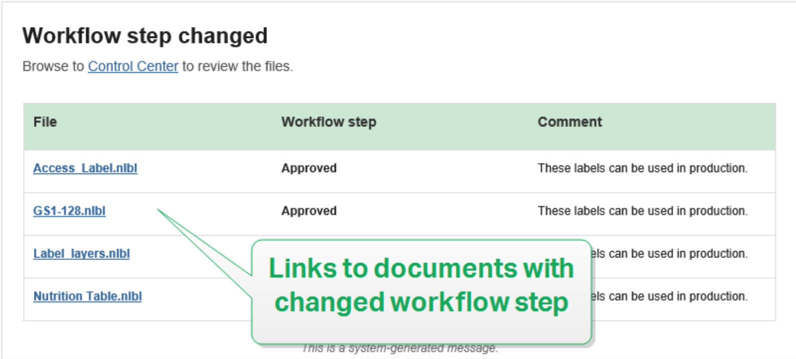
3. Type a **Name** and **Description** for your new workflow. Make them as descriptive as possible to make the workflow easy to find later.
4. Add and configure your workflow steps. Click **+Add** in the **Steps** field to add new steps. To edit an existing workflow step, select the step and click **Edit 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 read-only. 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.

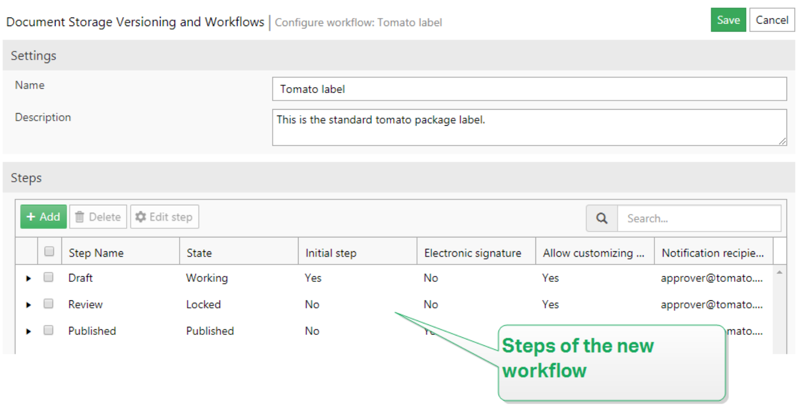



- Decide if your newly added step should be the **Initial step** of the workflow. If you select **Yes**, this step becomes the first step in your newly added workflow. You can only define one step as the initial step.
- For each workflow step, you can define which users receive notification emails after 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.

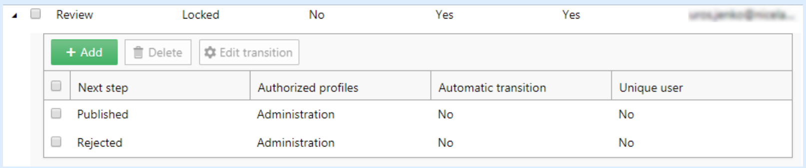
    - Click **+Add** to define the transition to the next step in the workflow. This is the step that the document transitions to after the authorized users give their approval. The **Edit workflow step transition** window opens.

        - **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.

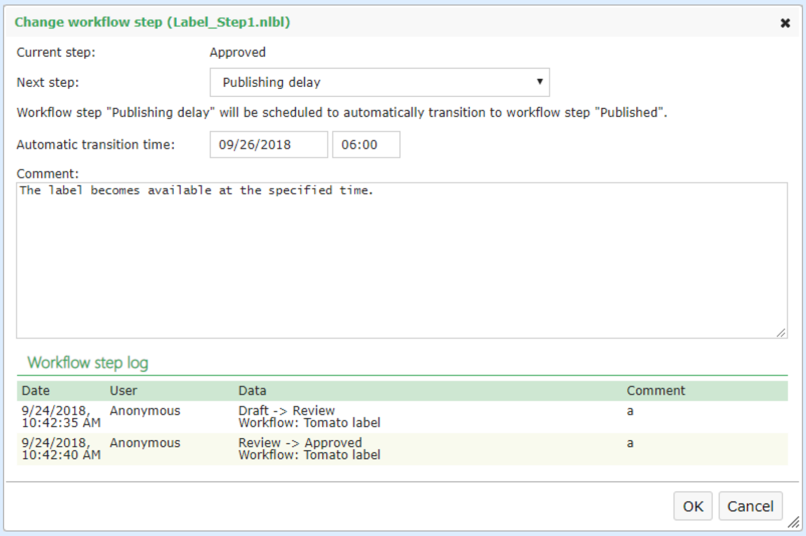
**EXAMPLE:** Your label has reached the Approved step, but you want to make it available for printing after a period of time. Add a Publishing delay step as the next step, and enable automatic transition for this step. When authorized users promote the label to the Publishing delay step, they define 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.
7. 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.

#### *4.3.6.10 Preventing Administrator From Approving Files*

By default, the Administrator account has full permissions in the NiceLabel Control Center, including the permission to approve files.

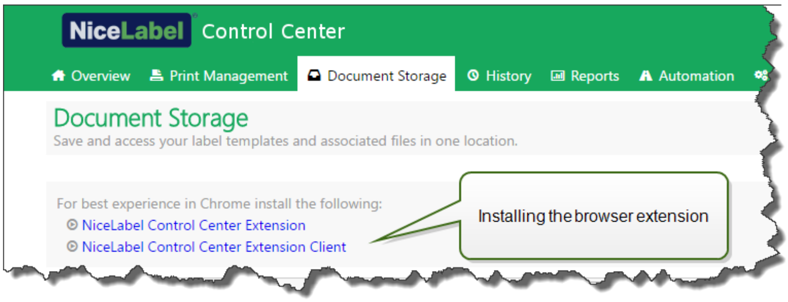
To revoke the permissions to approve files, do the following:

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

### 4.3.7 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.




# 4.4 Applications

## 4.4.1 Creating And Sharing 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.

**NOTES for users of previous Control Center versions:**

With the latest 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 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.

### *4.4.1.1 Creating Web Applications*

**Web Applications** link users or groups with labels and solution in the Document Storage.

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. **Browse** the Document Storage and select a solution or label file for sharing.

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

   **EXAMPLE:** /Labels/Test.nlbl

5. 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**.

#### *4.4.1.2 Sharing Web Applications*

1. Go to the **Authorized Users** group and click **+Add Users**. The **Add Users** window opens.
2. Select the existing users or groups from the list or invite new guest users.
   - The existing users or groups belong to your company's active directory (**Organizational users** and **Organizational groups**) or are defined as **Guest users**.
   - Click **Invite new guest** 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.

The added users or groups are now listed among the **Authorized Users**. 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 added users or groups from the **Authorized Users**. Select them from the list and click **Remove**.

#### *4.4.1.3 Configuring Web Applications*

- **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.

### 4.4.1.4 Restricting Application Logins And Printers

- **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.

NOTE: 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.

#### 4.4.1.5 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.

#### 4.4.1.6 Editing 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 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.

  NOTE: 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.

#### 4.4.1.7 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.

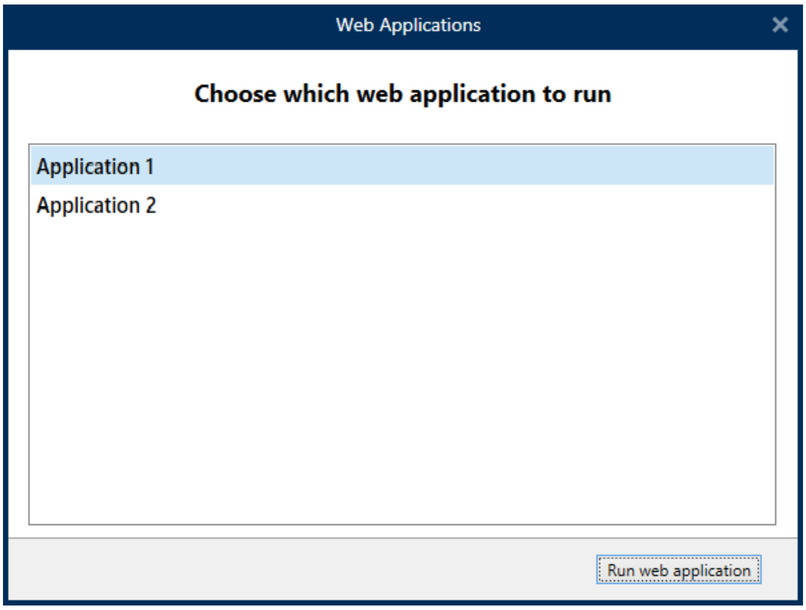
   NOTE: The Web Client installation is only required the first time you use the shared web applications.

3. 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.

4. 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.

5. 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 **Sign out** in the window title bar and the next user must sign in using their own Label Cloud account credentials.


## 4.4.2 Cloud Integrations

Cloud integrations enable the cooperation of your Label Cloud with existing business systems that run in their own cloud. If an existing business system (e.g. SAP S/4HANA or Oracle NetSuite) produces an output, a cloud-hosted API enables you to send HTTP requests to the cloud trigger.

The cloud trigger allows you to locally print labels whose content originates from the cloud information system. Because the cloud trigger that runs on the local Automation server uses standard methods for accessing the cloud-based services, you can deploy local printing in a secure and time efficient way.

The cloud trigger enables a secure and transparent way to integrate your local label printing using applications that communicate over the open Internet. Compared to the HTTP server trigger (for details, read the NiceLabel Automation User Guide), the cloud trigger does not require opening any ports in your firewall to enable the HTTP requests. Instead, the cloud trigger works using a dedicated NiceLabel API that runs on the dedicated secure Developer Portal.

Details on how you deploy the cloud trigger are available in NiceLabel Automation User Guide, section Cloud trigger.

When adding cloud integrations to the Control Center, you give the 3rd party developers (external integrators) the access to the cloud triggers. You grant these integrators access by giving them the integrator key.

To generate the integrator key, add the integrators to the Control Center **Cloud Integrations**.

1. To add new integrators, open your cloud Control Center and go to **Applications > Cloud Integrations**. The **Integrators** page opens.
2. Click **+Add** to add a new integrator. The integrator **Settings** page opens.
3. Type the **Name** of the integrator.

4. Your Control Center automatically generates the integrator **Key**. Copy this key and send the key to the integrator.
5. Click **Save**. The new integrator is now listed on the **Integrators** page.

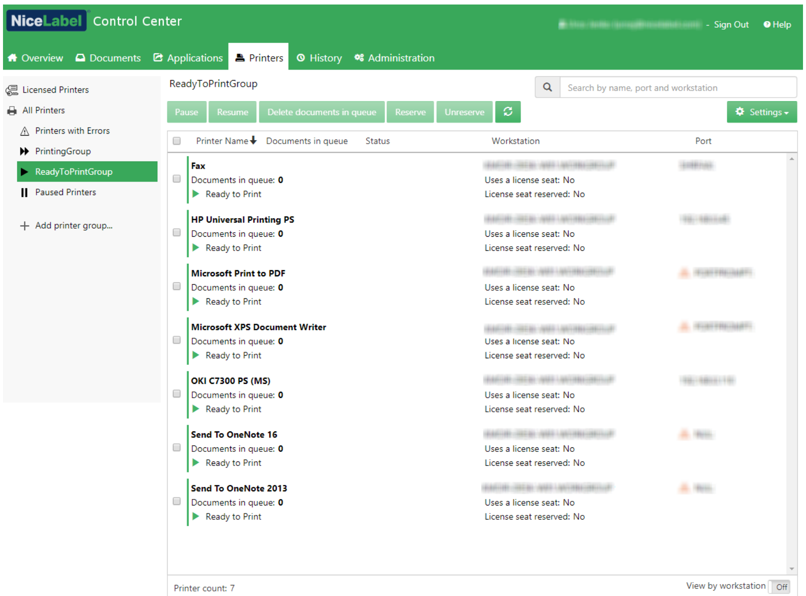
# 4.5 Printers

## 4.5.1 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.

NOTE: 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.




### 4.5.1.1 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.

#### *4.5.1.2 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.

#### *4.5.1.3 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**.

### *4.5.1.4 Searching And Filtering*

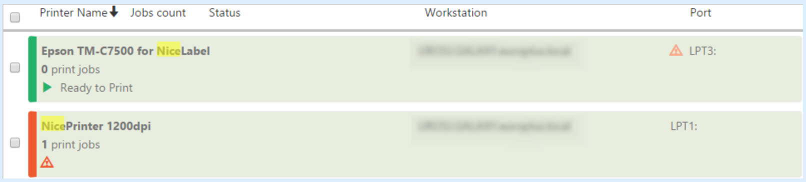
Use searching and filtering to select the printers or workstations that you wish to manage.

- **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.

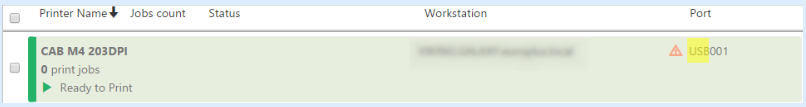
**EXAMPLE**

Printer Management searches through printer names, ports and workstations.

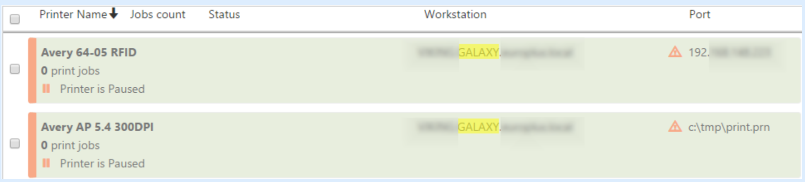
1. After entering "nice", only printers that contain "nice" in their name are displayed as search results.




2. After entering "usb", only a printer connected via USB port is displayed.




3. After entering "galaxy", only printers connected to workstations with "galaxy" in their names are displayed.




- **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.

#### *4.5.1.5 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 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.

### 4.5.2 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.

#### *4.5.2.1 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.

#### 4.5.2.2 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.

- **Printer name:** name of the connected printer. Printer driver name is displayed.
- **Documents in queue:** number of currently active print jobs.
- **Status:** shows current printer status. Reported statuses depend on the selected printing mode. If you are not using NiceLabel printer drivers, the statuses are reported by spooler.
  - **Ready to print:** your printer is online and ready to start printing.
  - **Paused:** printing is currently paused.
  - **Workstation not reachable:** the workstation connected to the printer is not reachable (offline).
  - **The printer has been deleted:** marks a deleted printer in two ways.
    - As a temporary printer status displayed right after the printer has been deleted. The printer disappears from the list after page reload.
    - If the deleted printer was a member of a static printer group, it remains listed among others displaying **The printer has been deleted** status.

  > NOTE: **Documents in queue** and **Status** are available for licensed printers.

  - **Error:** an error has been reported by the printer. Printing is currently not possible.

    Error statuses includes the following spooler error statuses:

    | Status | Definition |
    |---|---|
    | PaperJam | Paper is jammed in the printer. |
    | PaperOut | The printer is out of paper. |
    | PaperProblem | The printer has a paper problem. |

| Status | Definition |
|---|---|
| Offline | The printer is offline. |
| OutputBinFull | The printer's output bin is full. |
| NotAvailable | The printer is not available for printing. |
| NoToner | The printer is out of toner. |
| PagePunt | The printer cannot print the current page. |
| UserIntervention | The printer has an error that requires the user to do something. |
| OutOfMemory | The printer has run out of memory. |
| DoorOpen | The printer door is open. |

NOTE: Additional printer statuses are reported by NiceLabel printer drivers. These reported statuses differ according to your selected printer model.

NOTE: If a printer is paused and reports an error at the same time, it displays both icons.


- **Workstation:** name of the workstation connected to your printer.
- **Port:** port that is used for printer connection.

NOTE: An error is reported in case of a port conflict.

#### *4.5.2.3 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.

### 4.5.3 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.

### *4.5.3.1 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.

### *4.5.3.2 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.

- **Printer name:** name of the connected printer. Printer driver name is displayed.
- **Documents in queue:** number of currently active print jobs.
- **Status:** shows current printer status. Reported statuses depend on the selected printing mode. If you are not using NiceLabel printer drivers, the statuses are reported by spooler.
    - **Ready to print:** your printer is online and ready to start printing.
    - **Paused:** printing is currently paused.
    - **Workstation not reachable:** the workstation connected to the printer is not reachable (offline).

- **The printer has been deleted:** marks a deleted printer in two ways.
  - As a temporary printer status displayed right after the printer has been deleted. The printer disappears from the list after page reload.
  - If the deleted printer was a member of a static printer group, it remains listed among others displaying **The printer has been deleted** status.

> NOTE: **Documents in queue** and **Status** are available for licensed printers.

- **Error:** an error has been reported by the printer. Printing is currently not possible.

  Error statuses includes the following spooler error statuses:

| Status | Definition |
|---|---|
| PaperJam | Paper is jammed in the printer. |
| PaperOut | The printer is out of paper. |
| PaperProblem | The printer has a paper problem. |
| Offline | The printer is offline. |
| OutputBinFull | The printer's output bin is full. |
| NotAvailable | The printer is not available for printing. |
| NoToner | The printer is out of toner. |
| PagePunt | The printer cannot print the current page. |
| UserIntervention | The printer has an error that requires the user to do something. |
| OutOfMemory | The printer has run out of memory. |
| DoorOpen | The printer door is open. |

> NOTE: Additional printer statuses are reported by NiceLabel printer drivers. These reported statuses differ according to your selected printer model.

> NOTE: If a printer is paused and reports an error at the same time, it displays both icons.


- **Workstation:** name of the workstation connected to your printer.
- **Port:** port that is used for printer connection.

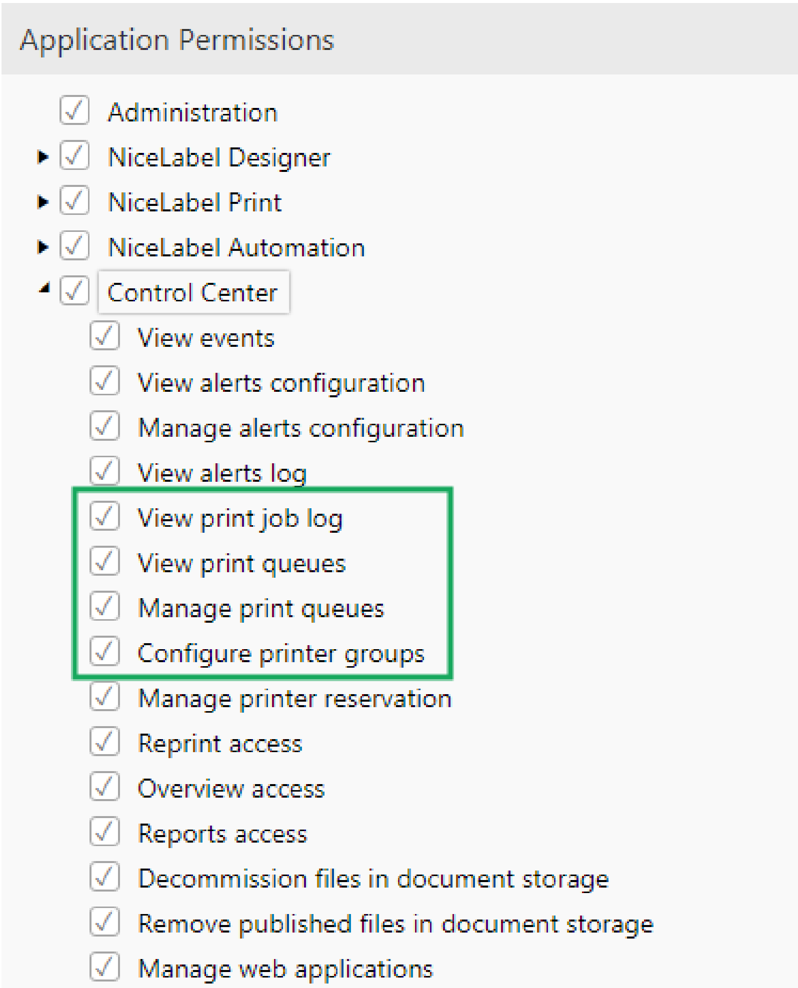
> NOTE: An error is reported in case of a port conflict.

## 4.5.4 Printer Tab Access Rights

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

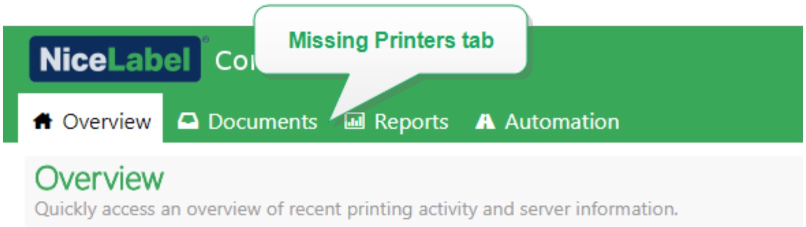
Print Management access rights are based on user authentication. After users log into Control Center, their assigned roles define the range of granted access rights.

To define the access rights for an access role, go to **Administration >** Access Roles. Select a role and see the **Application Permissions**. Expand the permissions. Scroll to the **Control Center** group of options




The following role options 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.

# 4.6 History

## 4.6.1 History

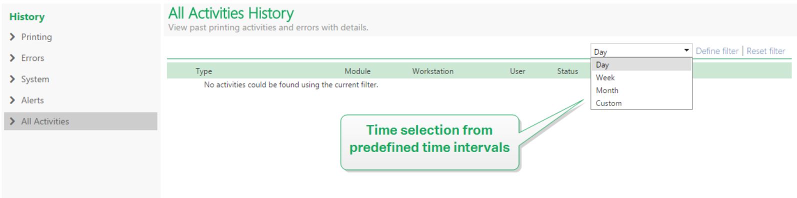
Control Center offers a detailed history log of all events in the printing system and a flexible sorting and filtering system, which assists you in finding the events that you're interested in. The events can either be displayed on a single list or split into the following categories:

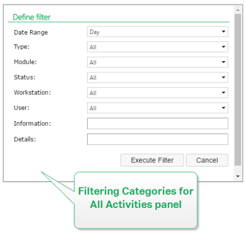
- **Printing.** All events directly related to print jobs.
- **Errors.** Reported printing errors.
- **System.** Audit log with documentary evidence of past activities.
- **Alerts.** List of issued alerts in printing system.
- **All Activities.** Aggregated overview of all past activities.

### *4.6.1.1 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.

### *4.6.1.2 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.

### *4.6.1.3 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, see topic 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, see topic Job Statuses.
- **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.

  **TIP:** The collected data can be used for label reprint.

- **Variables.** List of variables which are connected to the label.
- **Print preview.** Preview of the printed label.

### *4.6.1.4 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.

#### *4.6.1.5 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.

**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.

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

#### *4.6.1.6 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.

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.

#### *4.6.1.7 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. NiceLabel Designer or NiceLabel Print.
- **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.

### 4.6.2 Job Statuses

#### *4.6.2.1 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.

#### 4.6.2.2 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.

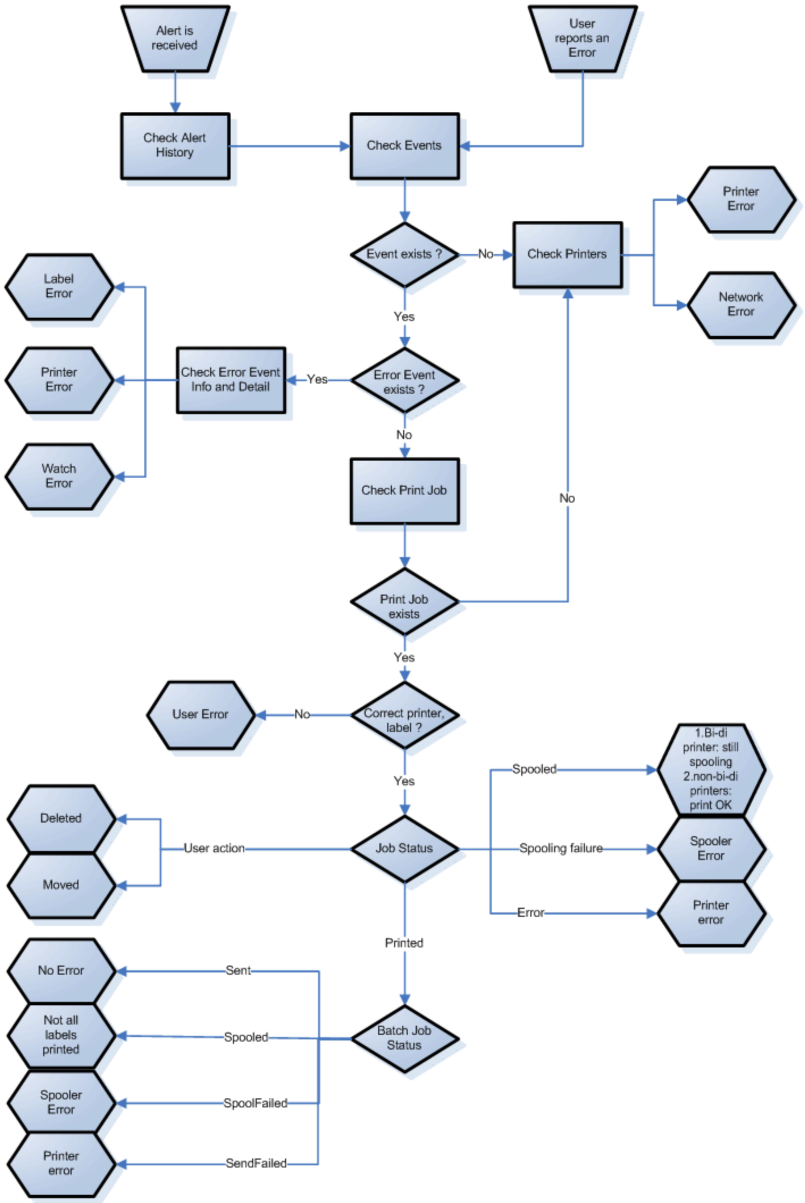
# 5 Technical Support

## 5.1 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 Centerinterface for finding and solving possible problems.

This topic 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:




## 5.1.1 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.

### 5.1.2 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).
2. 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.

## 5.2 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.

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