



User manual

nShift ApportConnect

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1. Installation

1.1 General disclaimer

Apport Connect is delivered as a self-containing solution, that is run as a program or service. That service must have access to the internet, the local network and the designated printers.

The ApportConnect software is dependent on:

- Server hardware
- Server operation system
- Access rights (including read/write)
- Internet access
- Local network and printer access
- Printer
- Printer Drivers/Configuration

Unifaun cannot be held responsible if any of these components affects latency, throughput, or quality in the ApportConnect software.

1.2 Prerequisites

Printers and Local network

ApportConnect software does not supply any support for printer drivers nor the specific settings that will be needed for the individual printers used, it relies on that a correct printer driver and correct settings are installed and set in the OS and server where the application is running.

ApportConnect will only be able to connect and communicate the data for documents to the designated printers thru the Windows printers installed on the same server as the application is running. The connection from the Windows printer to the physical printer can be handled thru direct connection to the printers IP address or if the printer is shared on another server. When the application has passed any documents to the ques used, Unifaun does not any longer take any responsibility for the support of the setup.

The Account running the ApportConnect application in application- or service-mode needs appropriate access to place print jobs to the printers used.

The performance of the printers and printing is depending on the local setup of the servers, rights and AD restrictions as well as infrastructure and LAN or WAN communication and printers used. This is completely out of the possibility and responsibility for Unifaun to support.



Label Printing

This applies to printing of transportation labels.

Labels can be printed to A4 lasers, but Unifaun's recommendation is to obtain and use a dedicated transportation label printer.

Any label printer with a correct setup and corresponding windows printer driver can be used.

Unifaun TMS produces the transportation labels as ZPL-format, being Zebra Programming Language, or as PDFs and by passing these thru the printer driver, any settings for format, paper source, paper destination, copies or other settings needs to be set in printer/driver settings.

When using ZPL format, the need of driver is restricted to Generic/Text only.

Unifaun does not make any recommendations nor take any responsibility for the printers used nor setup.

Unifaun have designed and tested all transportation labels on Zebra Technologies printers.

Unifaun recommends that the printers and label paper used is in the format of 105 mm width and upto 253 mm of length (depending on carrier service).

Other A4 documents

This applies to printing of Waybills, CMR, Receipt list or similar A4 documents.

Any laser printer with a correct and corresponding windows printer driver can be used.

Unifaun TMS produces these documents as PDFs and by passing these thru the printer driver, any settings for format, paper source, paper destination, copies or other settings needs to be set in printer/driver settings.

NShift does not make any recommendations nor take any responsibility for the printer nor setup.

Recommended hardware and operating system

NShift recommends that MS Windows Server 2019 or better is used as operating system.

Hardware requirements depends also on what other applications and services are running on the specific server, our recommendation is 2-4 GB of internal memory, 64-bit CPU with dual core or better and 2-5 Gb of disk for ApportConnect installation files, log files and transactional files.

Backup and cleaning of configuration files and transactional data files needs to be handled by customer. Routines on maintenance is completely on customer to handle. The performance depends on the complete setup and other related hardware, infrastructural and configurables, NShift does not take any responsibility on these parts.



1.3 Performance

NShift performs regression tests to validate performance of the current and previous versions of ApportConnect and have reached throughput of 2500-4000 created shipments and printed documents per hour for one instance of ApportConnect. The number of shipments and printed documents depends on many parts, like type of service, number of parcels per shipment and if only labels or also waybills are created as well as hardware and infrastructural setup as described in the prerequisites and recommendations.

Note that external dependencies, when NShift is forced by the Freight Forwarder to communicate with external services (Fedex, UPS and other International

1.4 Downloading

The latest version of NShift ApportConnect can be downloaded from [nShift ApportConnect](#) Be sure to download the correct installation file for your operating system.

1.5 Installing

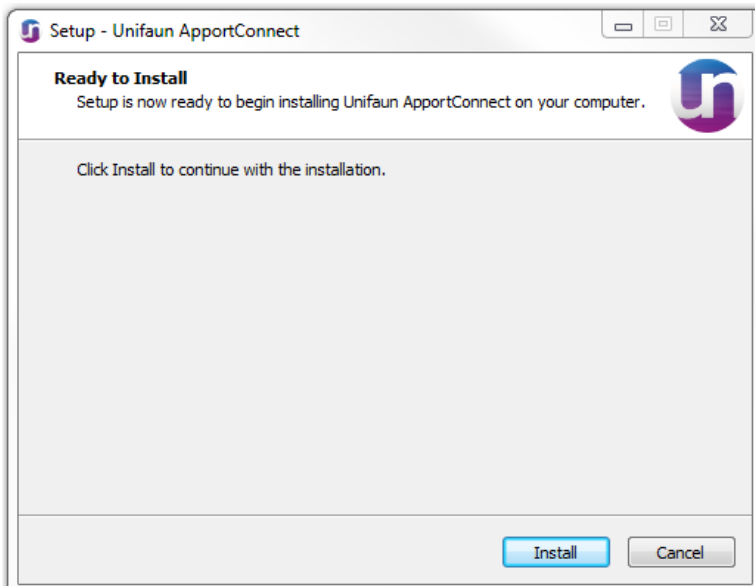
1.5.1 Installing on Windows

Before installing ApportConnect, make sure you have installed [Microsoft Visual C++ 2010 Redistributable](#)

Locate your downloaded installer in .EXE format for NShift ApportConnect, which you downloaded in [step 1.2](#)

Double click on the .exe called **NShift ApportConnect-?** (Where ? is the version number)

An installation wizard should now start.



Click "Install". On Windows 7 and above, the program installs itself under

C:\Users*username*\AppData\Local\ApportConnect

If you're using Windows XP or Windows Server 2000, it is installed under

C:\Documents and Settings*username*\Application Data\Local\ApportConnect

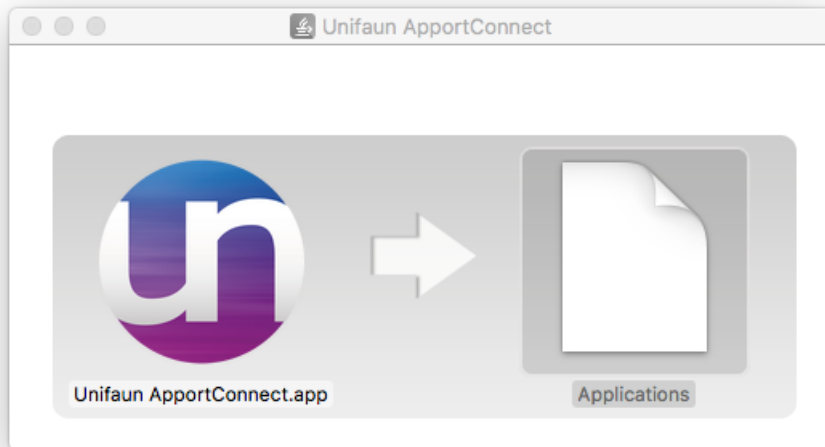
After the installation is complete, the program will automatically start. You're welcomed by the start-page of NShift ApportConnect.

You should now set up some users in the program. Jump to [step 2.1](#)



1.5.2 Installing on Mac OSX

Locate the downloaded DMG file containing the installation of Unifaun ApportConnect. Double-click the downloaded file, and it should mount to your **Mac system**. You'll be prompted with a drag-n-drop installation screen (See [Fig. 2](#))



(Fig. 2)

Simply drag the Unifaun ApportConnect icon into the Applications folder like the image displays. The installation is now complete! Start the program via your Dashboard, or by navigating to the *Applications* folder.

Proceed to setting up some users ([step 2.1](#))

1.5.3 Installing on Linux

Installing on Linux differs from distro to distro.

These examples will be using Ubuntu 16.04, debian packaged.

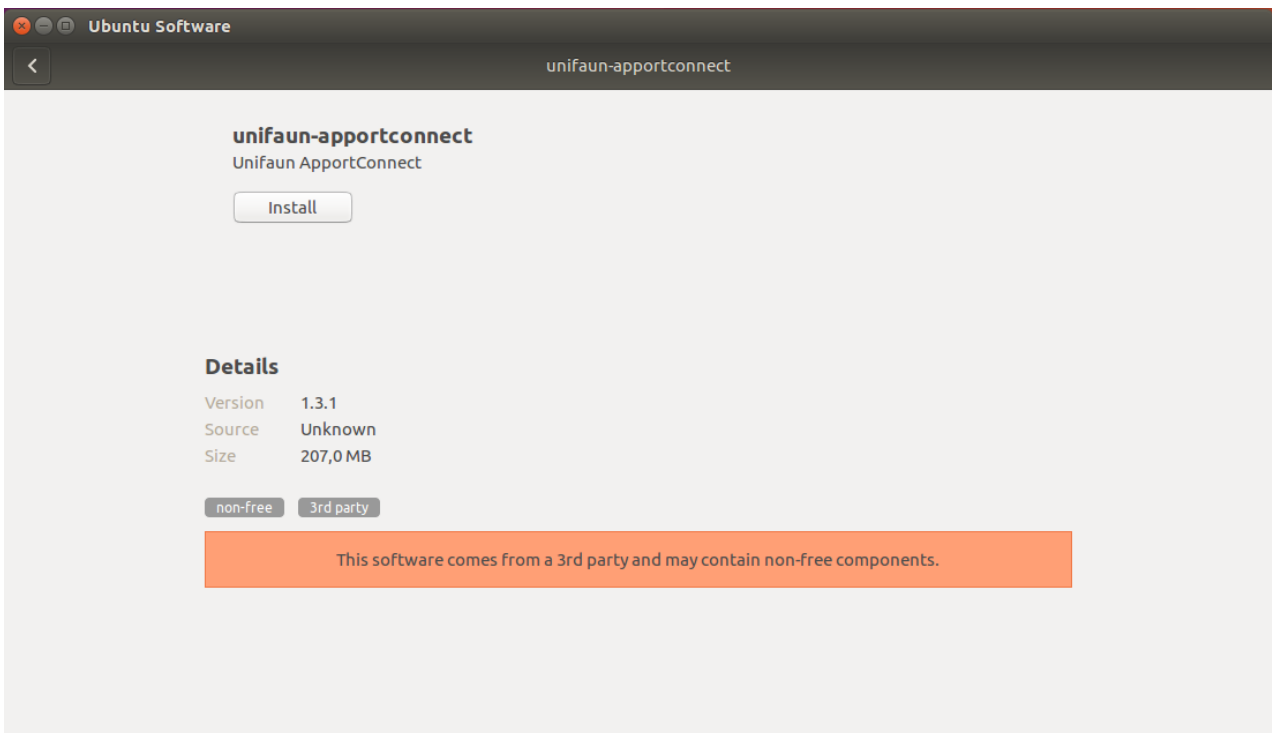
(An rpm version also comes bundles. If you want, you can also run it from a raw .jar file.

See [step 1.3.4](#))

Locate the downloaded .ZIP, extract it and select the .deb file containing the Unifaun ApportConnect installation.

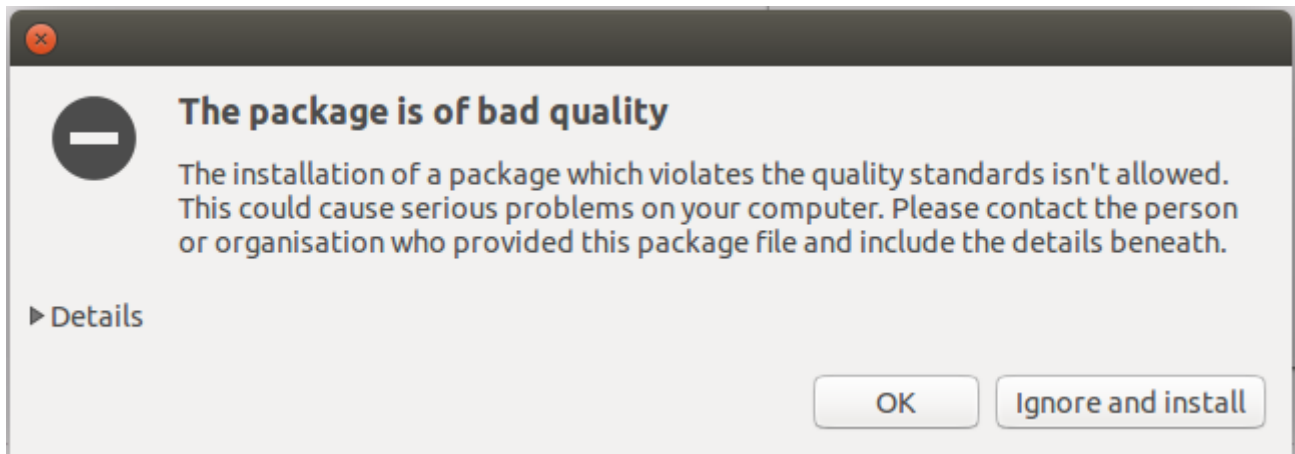
Double click the the .deb package and it should open **Ubuntu Software Center**

Click the “Install” button on the right. (See [Fig. 3](#))



(Fig. 3)

The installation will now start. If you get a popup saying that the package is of bad quality, click “Ignore and install”. (See [Fig. 4](#))



(Fig. 4)
(You may need to authenticate yourself to install this package.)

Once installed, the program can be located under **/opt/UnifaunApportConnect**
You might need to change the permissions of this folder in order to properly use the program. (e.g: `sudo chmod -R 777 /opt/UnifaunApportConnect`)

1.5.4 Others/Advanced



Installing Unifaun ApportConnect on other systems is not officially supported, try at your own risk.

First of all, install Oracle Java™ 8 update 102 runtime or later (1.8u102). You will need to be a system administrator to do so.

Locate the downloaded .JAR file. Run it from a command prompt with **java -jar “Unifaun ApportConnect-?.jar”** (where ? is the version number)

The program will then have to make some needed files in order to operate properly. So make sure that the program and Java™ runtime has the correct permissions on the current folder.

1.5.5 Updating



NShift ApportConnect MUST BE completely shut down before starting the upgrade process. (This also applies if you're running NShift ApportConnect as a service)



Upgrading from 1.2.1 or earlier? The application will install in a new location since it's rebranding to "NShift ApportConnect". (Previously Memnon Printr) You can import your old settings from the old installation directory (Mainly "settings.pintr"). Please see separate instructions for Migrating from PrintR to ApportConnect (instructions can be downloaded from www.nShift.com/apport) to get help on how to import old settings.

Updating NShift ApportConnect is fairly simple, just follow the below instructions.

1. Download the new version of NShift ApportConnect.
2. Uninstall the currently installed version of NShift ApportConnect. (See below steps on how to uninstall)
3. Run the installation program and follow the instructions given on the screen. An update works exactly like installing a fresh copy of NShift ApportConnect. Your settings will be kept intact. If you need more help installing, refer to [step 1.3](#)

Uninstallation

Don't worry, your settings and NShift ApportConnect users will not be removed, if you follow these steps.

1. Windows

- Find the installation directory of NShift ApportConnect.
(Either in *C:\Users\<username>\AppData\Local\ApportConnect* or *C:\Documents and Settings\<username>\Application Data\Local\ApportConnect*)
- Click the uninstaller (unins000.exe) and follow it's directions.
- When it's done, DO NOT remove anything else from it's previous installation folder. Removing the "app" folder, or the "ApportConnect" folder in AppData/Local will remove your NShift ApportConnect settings.
- You're now free to install a new version of NShift ApportConnect.

2. Mac OSX

- Simply remove "Unifaun ApportConnect" from your Applications folder.
- DO NOT remove any of ApportConnect's files in your Home directory.
- You're now free to install a new version of Unifaun ApportConnect.

3. Linux

- Locate your installation (most likely in */opt/UnifaunApportConnect*)
- Remove all files and folders *EXCEPT* the folder named "app"
Removing the "app" folder, will remove your Unifaun ApportConnect settings.- You're now free

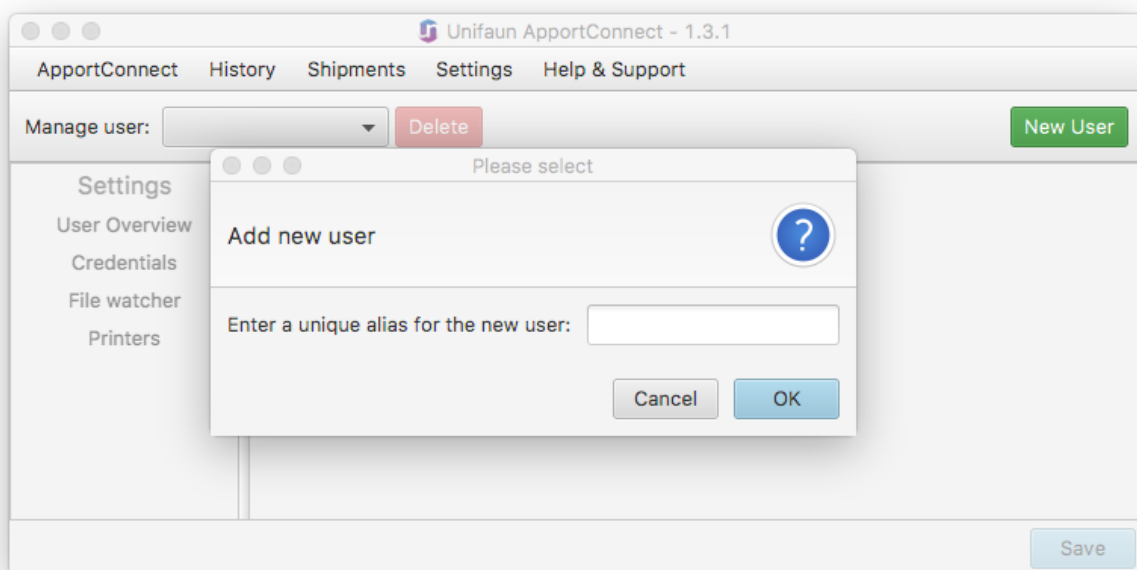


to install a new version of NShift ApportConnect.

2. Getting Started

2.1 Setting up users

To start configuring NShift ApportConnect, start the program, and click “Settings”, Manage Users. By default, no users are set up from start. To add a new user, click “New User” and enter an alias for your new user when prompted. This alias must be unique to the other users that you’re going to set up. You can set up as many users you need.



Use the left-hand menu to navigate.

Click **Credentials**, and fill out the credentials fields (username, domain and password fields) for your Transport Administration portal account in the according fields. After that, click **File watcher** and select the file watcher path. Files found in this folder will be sent to NShift Apport. If you do not want to integrate and send files to NShift Apport, skip this step.

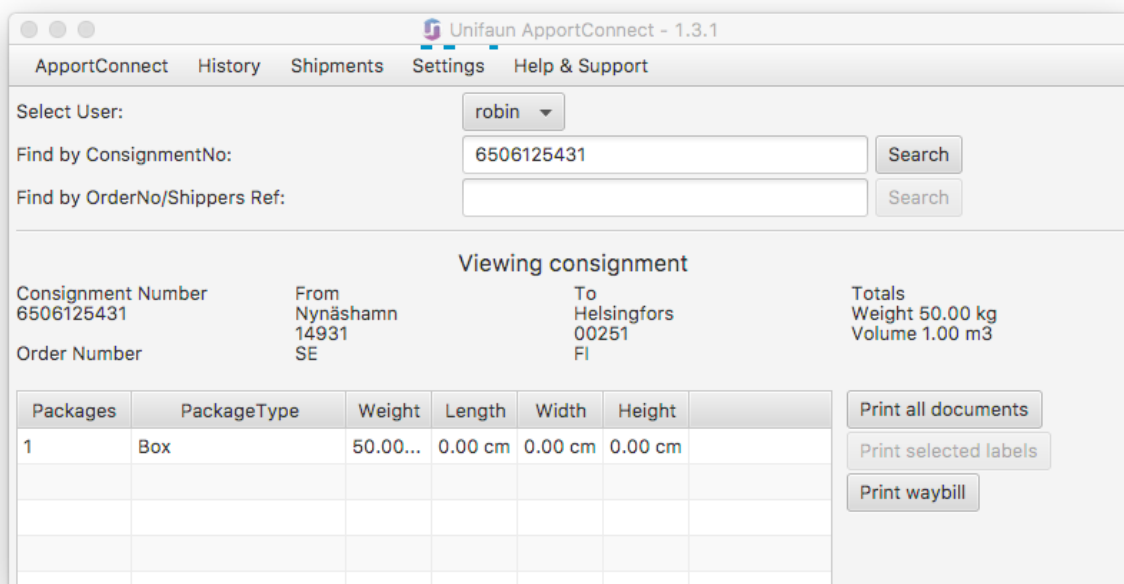
Click **Printers**, and select your label & document printer. Only printers already recognized by your operation system will show up here. You can also choose if you would like to print your labels in ZPL or PDF format. To see what the other options are, jump to [step 2.3](#) or [step 3.4](#)

To configure settings such as label position on labels that have “the top sticker”, or the settings for page orientation and multiple labels on one paper, refer to your **account settings in your Transport Administration portal**.

2.2 Printing existing consignment documents

2.2.1 Manually via GUI

You can easily print consignment documents and labels for existing consignments from the Shipments-tab Find&Print. Here you can search and find consignments by entering search criteria for consignment number or Order number / Shippers Reference. After selecting a user, and entering your search criteria, click "Search". Some basic information about the found consignment can be seen. (See picture below) To print all documents for this consignment (all labels and waybill) click "Print all documents". To re-print select labels only, select which goods rows you want printed, and click "Print selected labels". To learn more about setting up users, refer to [step 2.1](#).



2.2.2 Automatically via comma separated file

You can also print documents for existing consignments automatically by placing text files containing comma separated consignment numbers in the "p_print" -directory, located in the watching path you specified when setting up your user. NShift ApportConnect will automatically recognize your consignments, fetch their documents and print them for you.

2.3 Integrating with Apport

This section will cover the most common use case of NShift ApportConnect.

By choosing a watching path when configuring the user, done in [step 2.1](#), you tell NShift ApportConnect to watch that specific directory for incoming integration files.

(If this is the first time specifying the watching path, 5 folders will be created in that directory. So be sure that the program has write and read permissions in the specified path)

The watching path is unique, and cannot be setup on multiple users.



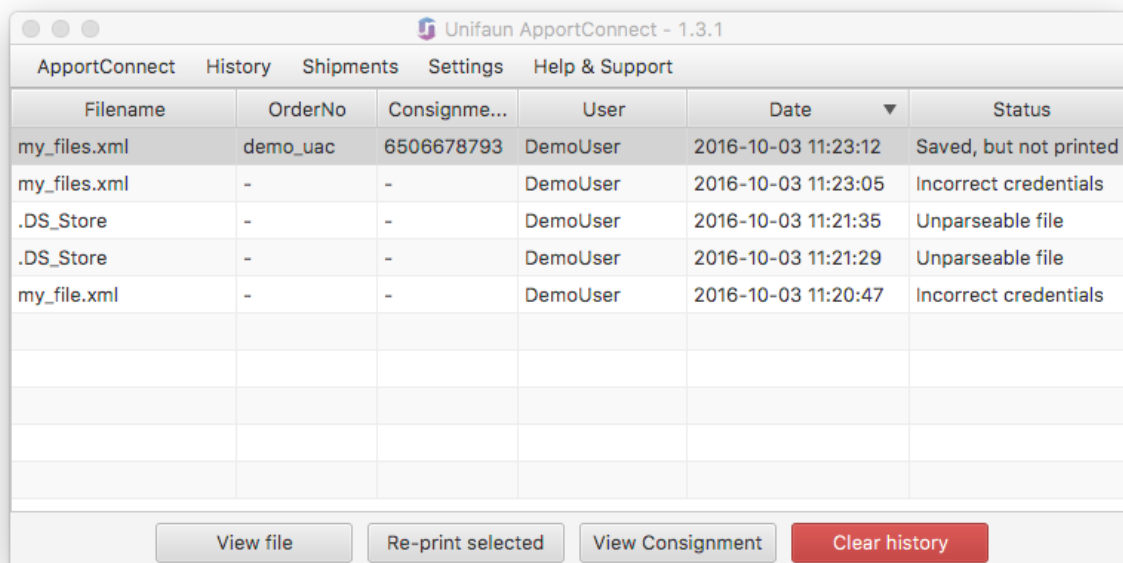
NShift ApportConnect will find any file put, or currently in this folder. Make sure it's clear of unwanted files when NShift ApportConnect should start using it.

When NShift ApportConnect discovers a new file in this folder, it sends the file to Apport, using the domain, username and password of the user that is watching the directory. It is then validated and, if successful, one or several consignments are created from contents of the file.

If the file appears to be invalid, Apport returns one or several errors, telling you what's wrong.

After an integration file has been processed, it shows up under the History / Integration section ([step 3.1](#)), where you can view the status of the file and the created consignments. The file itself has been moved and renamed with a date stamp, and can be found in the **p_success** or **p_error** directory, depending on the status of the file.

You can easily see the file by clicking on the button **View file**. You can see details of the consignment by clicking **View consignment** and re-print selected by clicking **Re-print Selected**.



Filename	OrderNo	Consigme...	User	Date	Status
my_files.xml	demo_uac	6506678793	DemoUser	2016-10-03 11:23:12	Saved, but not printed
my_files.xml	-	-	DemoUser	2016-10-03 11:23:05	Incorrect credentials
.DS_Store	-	-	DemoUser	2016-10-03 11:21:35	Unparseable file
.DS_Store	-	-	DemoUser	2016-10-03 11:21:29	Unparseable file
my_file.xml	-	-	DemoUser	2016-10-03 11:20:47	Incorrect credentials

2.3.1 Automatic printing

(Found under User Settings -> File Watcher)

You can choose to automatically print the consignments that are created when integrating with Apport. The documents will be fetched from the consignment(s) created from the sent integration file. The label (and waybill if applicable) will be printed using the printer(s) that has been set up on the user used to integrate with.

If not ticked, you may choose to print the documents whenever you want to from the Integration History tab.

2.3.2 Response file

If your integration with Apport has enabled the use of a response file, it will be saved in the folder called **p_responses**. This file usually contains information about the consignments created, validation errors, prices and other data.

If you are unsure if you have this option enabled, or would like to know how it works, please contact the support.

2.3.3 “Multi User” / Redirecting documents

(Found under User Settings -> File Watcher)

NShift ApportConnect is built with the vision of having different users setup with their printers. These users have their own watching path and will send files found in their own folders, while printing with their own printers.

If you do not have the ability to output files in different folders/watching paths for different NShift ApportConnect users, there is a way to “redirect” or change owner of consignments and documents to another NShift ApportConnect user.

This is called **Multi User**.

It works by entering some extra details into your integration file. (The one to be sent to Apport). To enable this feature; setup the users you want to use (for instance 2 warehouse users) and be sure to remember their NShift ApportConnect aliases. The integration user is already set up and have a watching path ([step 2.3](#)) and ticked “**Enable ‘Multi User’**”. (see [fig. 10](#)). This will be the only user that has a watching path setup and the enabled ‘**Multi User**’ checkbox. All other users do not need to have this.

Now you have to add a custom reference in your integration file. The name/type of the reference is “**printr_user_alias**” and the value is a NShift ApportConnect alias. If you’re using standard XML to integrate, this is how it could look:

```
<?xml version="1.0" encoding="utf-8"?>
<ConsignmentList>
  <Consignment orderNo="DemoUser 123456">
    ...
    <Reference type="printr_user_alias">
      <reference>WAREHOUSE1</reference>
    </Reference>
  </Consignment>
</ConsignmentList>
```

(If you're using a different file format to integrate, please refer to the Apport Integration manual or contact the support)

When this file is sent to Apport from the user that has a watching path, the consignment will be created (if all needed information is present), and as soon as the response is returned to NShift ApportConnect, the file / consignment will change NShift ApportConnect owner to the one specified in the reference (eg. "WAREHOUSE1" from the picture above). If the supplied NShift ApportConnect alias does not exist in NShift ApportConnect, a message will be written to the log about this, and the owner does not change. Instead, it sticks to the user that sent the file in the first place.

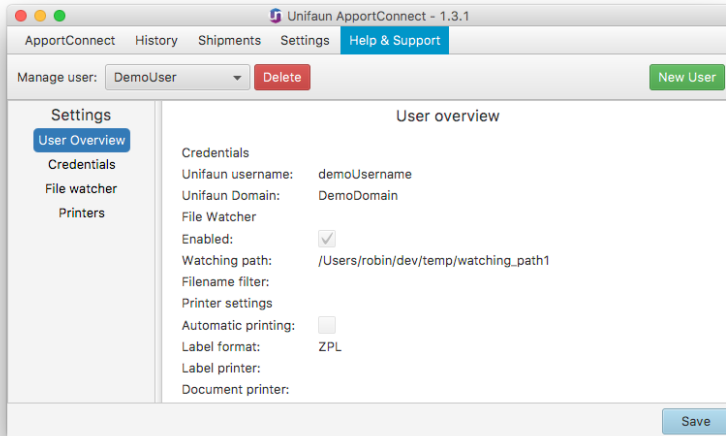
If no reference is sent whilst still having "Multi User" enabled, the owner is left unchanged.

After the response is returned, and the owner has changed, the integration history item will belong to the new user. If you have enabled "Automatic Print" ([step 2.3.1](#)) for the new user, documents will be fetched and printed automatically on the new user's printers.

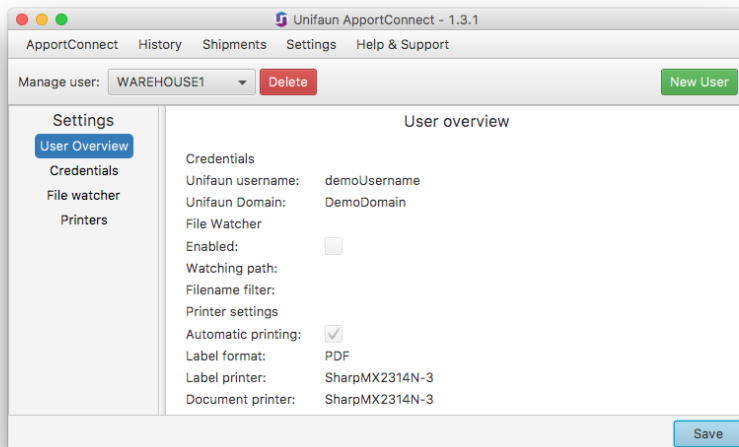
An example workflow is pictured below:

2 NShift ApportConnect users are setup: **DemoUser**, **WAREHOUSE1**

User **DemoUser** has a watching path and has enabled “Multi User”, but no printers.



User **WAREHOUSE1** has enabled “Automatic Print” and has some printers setup.



1. An integration file containing the reference type=“**printr_user_alias**” with the value=“**WAREHOUSE1**” is put in **DemoUsers**’s watching path.
2. The file gets sent to Apport using **DemoUsers**’s integration credentials.
3. The consignment is created and a response is returned to NShift ApportConnect.
4. NShift ApportConnect changes the owner of the integration job to user **WAREHOUSE1**
5. User **WAREHOUSE1** makes a document request (because the user has “Automatic Print” enabled), with the user's own integration credentials. (In the above example, both Demo and WAREHOUSE1 uses the same integration credentials to integrate)
6. The returned documents are printed on **WAREHOUSE1**’s printers

3. More Information

3.1 History Integration

This tab contains information about your processed integration files. You can view the filename, order/consignment number, user, date and status of the last 500 consignments.

The status column shows a general status for a given consignment, and if you hover over the consignment row with the cursor, you get a tooltip showing what the status actually means.

You can also print one or several consignments with the button located in the bottom of the window.

Simply select the desired consignments in the table-list, and press the button. (Note that you can only print documents for consignments that were created successfully. That means, consignments that has a consignment number assigned)

If you would like to view the related integration file you can press the **“View file”** button.

You can also clear the history by clicking **“Clear History”**

Click **“View Consignment”** to see basic consignment information and the ability to reprint only selected labels.

3.2 History Printing

The History Printing tab lists information about your printed consignments. You can view the consignment number, user, number of docs, date and status of the last 500 printings. The status column shows a general status for a given printjob.

You can choose to print one or several consignments with the button located in the bottom of the window.

3.4 Settings Tab – User settings

The settings tab is where You setup your users. By default, the list of users is empty. To add a new user, click “Add New” and enter an alias for the user when prompted. This alias must be unique to the other users that you’re going to set up. You can set up as many users that you need.

Fill in the username, domain and password for your NShift Apport user in the according fields. Then select the printer(s) you would like to use when printing labels and documents. Only printers already recognized by your operation system will show up here.

You can test the selected printer and selected label format by clicking the “Test” button next to the printer input field.

You can choose if you would like to print your labels in ZPL or PDF format. You can use the same printer for both labels and documents as long as it supports the selected label format. The waybills always come in PDF format.

The Automatic Print checkbox should be ticked if you want to automatically print documents and labels. The documents will be fetched from the consignment(s) created from the sent integration file. If not ticked, you may choose to print the documents whenever you want to from the Integration History tab. See [step 2.3.1](#)

The watching path refers to the directory you want NShift ApportConnect to monitor for this user. Files that are put in this directory will be validated and transformed into consignments in Apport. See [step 2.3](#)

4. Advanced



This section is only for experienced users, and/or troubleshooting purposes.

Modify files at your own risk

In order to make any changes work, you will need to stop and restart the application

4.1 Logging

NShift ApportConnect logs events in a file named **application.log** located in the installation directory. If you are unsure where NShift ApportConnect is installed, refer to [step 1.3](#).

If something goes wrong, you might want to send the log file(s) to NShift's Customer Support for review. By default, the log level is set to *INFO*. This will only log the most important events, and errors. You can change the level to *DEBUG* by going to “**Settings -> ApportConnect Settings -> General settings**” This will cause NShift ApportConnect to log all events and errors, with more detailed information that can be useful when debugging and troubleshooting.

You can also send the logfile directly to NShift's Customer Support, by clicking “**Help & Support -> Contact NShift**”, fill out the form and click send. The logfile will be automatically attached.

4.2 Settings file

The **program & user settings** is saved in 2 separate files: `user_settings.json` and `program_settings.json`, located in the same directory as the logfile. (The installation directory). This file contains information about the user's setup in NShift ApportConnect, as well as which server to send files and fetch documents from.

4.3 Proxy settings

NShift ApportConnect supports usage of a https proxy for all outgoing communication.

If you would like to activate this feature, head over to “**Settings -> ApportConnect settings -> Proxy settings**”. Activate the proxy and fill out the proxy address and port. Make sure to restart the application after saving the changes.

4.3 Headless mode

You can run NShift ApportConnect in a headless mode. Pass in the program argument “**-headless**” when starting the program. It will run as a process in the operating system, but no GUI will be displayed. If you run the program from a terminal, it should display all the output (logging) directly to you. You also have some basic commands you can input in the terminal, to get more information and do manual prints. To

see what the commands are, type “help” and you should see a list of commands.

4.4 Running as a Windows Service

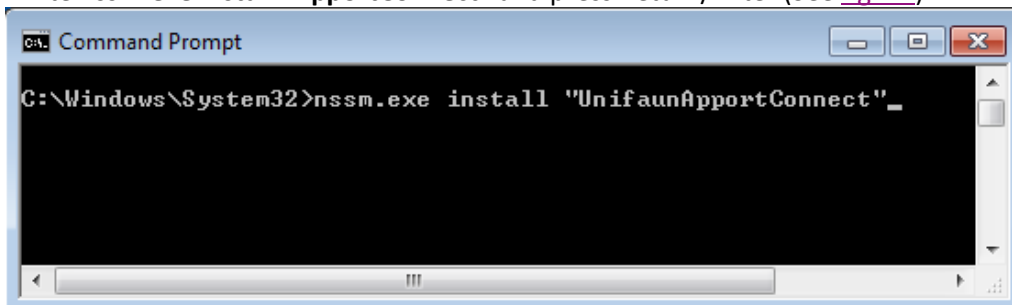
Because of NShift ApportConnect's platform independency, native code to run NShift ApportConnect as a Windows Service has not been included. There is however a pretty simple way of getting NShift ApportConnect to run as a service, which includes using a 3rd party library.



NShift can not take responsibility or ensure full functionality of 3rd party applications.

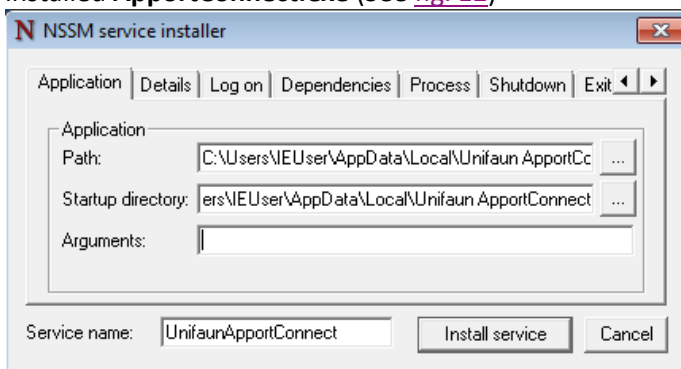
This example will be using the program called NSSM (Non-Sucking Service Manager) to install NShift ApportConnect as a Windows service.

1. Download NSSM at (<http://nssm.cc/download>)
2. Unpack and select the win32 alt win64 folder depending on your OS architecture.
3. Copy nssm.exe from the correct folder (from step 2) to any place on your computer (or *C:\Windows\System32* if you want it to be globally accessible)
4. Start a Windows command prompt with administrator privileges.
5. (Skip this if nssm.exe is in *C:\Windows\System32*) Navigate to nssm.exe in the command prompt.
6. Write **nssm.exe install “ApportConnect”** and press Return/Enter (See [fig. 11](#))



(Fig. 11)

7. You should be prompted with a new window. In “Application Path”, browse and select the installed **ApportConnect.exe** (See [fig. 12](#))



(Fig. 12)

8. You can also select various other options in this program. Such as which user to run the service as, process priority, shutdown methods, automatic restart and so on. Refer to the NSSM usage guide for more information: <http://nssm.cc/usage>
9. When you're done configuring the service, click "Install service".
10. To later edit the service via NSSM, open a command prompt and type **nssm.exe edit "ApportConnect"**

4.4 End Points

The following End Points are used by Apport Connect

<https://service.web-ta.net/integration/api/printr/print>

<https://service.web-ta.net/integration/api/printr/incoming>

<https://service.web-ta.net/integration/api/printr/lookup>

<https://service.web-ta.net/integration/api/printr/version/getnew>

<https://service.web-ta.net/integration/api/printr/support>

Port: 443 (https://)

5. Support

5.1 Changelog

Recent changes in NShift ApportConnect

Version	Changes
1.5.2	<ul style="list-style-type: none">• Corrected a configuration flaw which caused the file Application.log not to be created and updated as expected.
1.5.1	<ul style="list-style-type: none">• Rebranded to nShift ApportConnect• Added possibility to configure additional documents in user settings• Update to log4j2 (previously log4j)
1.5.0	<ul style="list-style-type: none">• Bundling and building with AdoptOpenJDK 14 (previously Oracle JDK 8u102) and OpenJFX• Embedded fonts, no longer dependent on native fonts

1.4.0	<ul style="list-style-type: none"> • Added setting if files should be stored or not • Showing current target environments in menu bar • Enhancements in “Find & Print”-view with more information for consignment
1.3.1	<ul style="list-style-type: none"> • Fixed a bug where hidden files were detected by the file watcher • Now bundling JRE 1.8.0_102
1.3.0	<ul style="list-style-type: none"> • Complete rewrite of the application with a new more intuitive GUI and improved performance. • New “Find & Print” view, search and re-print by consignmentNo/OrderNo • New “Help & Support” view, send a support request directly • Ability to add a file-name mask for a watching path • Ability to save copies of documents in a folder • Rebranding from Unifaun Printr to Unifaun ApportConnect
1.2.1	<ul style="list-style-type: none"> • Rebranding from Memnon Printr to Unifaun Printr
	<ul style="list-style-type: none"> •
	<ul style="list-style-type: none"> •
	<ul style="list-style-type: none"> •
1.2.0	<ul style="list-style-type: none"> • Added support for “Error Label” • Removed recursive lookup of files in watching path • Added confirmation dialog when selecting a non empty folder as watching path
1.1.0	<ul style="list-style-type: none"> • <u>MAJOR changes. Previous versions do no longer work</u> • Added support for “Multi User” / redirection of documents • Added support for continuous labelling • Fixed printer “Test” button to work properly • Added troubleshooting when updating, to this manual • Fixed misspellings in popups • Bundling JRE 1.8.0_40
1.0.1	<ul style="list-style-type: none"> • Fixed bug where some integration files were sent with the wrong encoding
1.0	<ul style="list-style-type: none"> • Initial release