



KONICA MINOLTA

# LINUX CUPS DRIVER

## User Guide

✍ May 30<sup>th</sup> 2016

✍ Version: 1.11



## Contents

- Software End User License Agreement .....3
- Conventions used in this document .....5
- Description .....5
- Features.....6
- Requirements.....6
- Restrictions .....6
- Installation.....6
  - Restart the CUPS server.....6
  - Automatic Installation .....7
  - Manual Installation .....7
    - A. Install the PPD file .....7
    - B. Install the filter .....8
    - C. Restart CUPS.....8
  - Add printer to CUPS.....8
  - Updating previously installed driver package .....9
  - Un-installing driver package .....10
- Printer Driver Encryption .....11
  - Security Considerations .....12
- Workaround .....13
  - Workaround 1.....13
  - Workaround 2.....14
  - Comparison Workaround 1 and 2.....15
- Supported Products .....16
- Change Log .....17

## Software End User License Agreement

PLEASE READ CAREFULLY THE LICENSE AGREEMENT BELOW BEFORE DOWNLOADING, INSTALLING OR USING THE SOFTWARE. DOWNLOADING, INSTALLING OR USING THE SOFTWARE SHALL BE DEEMED YOUR LAWFUL ACCEPTANCE OF THE TERMS AND CONDITIONS BELOW. IF YOU DO NOT AGREE TO THEM, DO NOT DOWNLOAD, INSTALL, NOR USE THE SOFTWARE.

### 1. SOFTWARE

"Software" means this computer program (software) downloaded on royalty-free basis (which may include digitally encoded, machine readable, scalable outline font data as encoded in a special format), together with all codes, techniques, software tools, format, design, concepts, methods and ideas associated with the computer program and all documentation related thereto.

### 2. COPYRIGHT AND INTELLECTUAL PROPERTY RIGHTS

This is a license agreement and not an agreement for sale. Konica Minolta Business Solutions Europe GmbH ("Konica Minolta") owns, or has been licensed from other owners ("Konica Minolta Licensor"), copyrights and other intellectual property rights of the Software, and any and all rights and title to the Software and any copy made from it are retained by Konica Minolta or Konica Minolta Licensor. In no event, this Agreement shall be deemed to assign any copyright and/or any intellectual property rights of the Software from Konica Minolta or Konica Minolta Licensor to you. Except as stated in this Agreement, you are not granted any rights to patents, copyrights, trade names, trademarks (whether registered or unregistered), or any other rights, franchises or licenses in respect of the Software. The Software is protected by copyright laws and international treaty provisions.

### 3. LICENSE

Konica Minolta hereby grants to you, and you agree to accept a non-exclusive, non-transferable and limited license, and you may:

- (i) install and use the Software only on your computer(s) connected via in-house network with a product for which this Software is designed;
- (ii) allow users of the computers described above to use the Software, provided that you assure that all such users comply with the terms of this Agreement;
- (iii) use the Software only for your own customary business or personal purpose;
- (iv) make one copy of the Software only for backup or installation purpose in the support of the normal and intended use of the Software;
- (v) transfer the Software to other party by transferring a copy of this Agreement and all documentation along with the Software, provided that (a) you must, at the same time, either transfer to such other party or destroy all your other copies of the Software, (b) such transfer of possession terminates your license from Konica Minolta, and (c) you must assure that such other party has agreed to accept and be bound by the terms and conditions of this Agreement. If such other party does not accept such terms and conditions then you shall not transfer any copy of the Software.

### 4. RESTRICTIONS

(1) You shall not without the written consent of Konica Minolta:

- (i) use, copy, modify, merge or transfer copies of the Software except as provided herein;
- (ii) reverse engineer, reverse assemble, reverse compile or any other way analyse the Software except permitted by law;
- (iii) sublicense, rent, lease or distribute the Software or any copy thereof; or
- (iv) remove, use, or alter any trademark, logo, copyright or other proprietary notices, legends, symbols or labels in the Software.

(2) You agree that you will not export the Software in any form in violation of any applicable laws and regulations regarding export control of any country.

### 5. LIMITED WARRANTIES

THE SOFTWARE IS PROVIDED TO YOU "AS IS" WITHOUT ANY WARRANTIES WHATSOEVER. THE EXPRESS TERMS OF THIS AGREEMENT ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED AND KONICA MINOLTA, ITS AFFILIATE COMPANIES AND KONICA MINOLTA LICENSOR DISCLAIM ALL WARRANTIES WITH REGARD TO THE SOFTWARE, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, IMPLIED

WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT OF THIRD PARTY RIGHTS. The disclaimer of warranty hereunder does not affect your statutory rights. In case of the disclaimer is not allowed by applicable law, the disclaimer shall only apply to you to the maximum extent permitted by the law.

#### 6. LIMITATION OF REMEDIES

IN NO EVENT WILL KONICA MINOLTA, ITS AFFILIATE COMPANIES NOR KONICA MINOLTA LICENSOR BE LIABLE FOR ANY LOST PROFITS, LOST DATA, OR ANY OTHER INDIRECT, SPECIAL, PUNITIVE, INCIDENTAL OR CONSEQUENTIAL DAMAGES THAT RESULT FROM USE OR INABILITY TO USE THE SOFTWARE, EVEN IF KONICA MINOLTA, ITS AFFILIATE COMPANIES, ITS AUTHORIZED REMARKETERS OR KONICA MINOLTA LICENSOR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR FOR ANY CLAIM BY YOU BASED ON A THIRD PARTY CLAIM.

#### 7. TERMINATION

You may terminate this license at any time by destroying the Software and all your copies of it. This Agreement shall also terminate if you fail to comply with any terms hereof. Upon such termination, you must immediately destroy all copies of the Software in your possession.

#### 8. GOVERNING LAW

This Agreement shall be governed by the laws of the country where the delivery is made to the original customer.

#### 9. SEVERABILITY

In the event that any part or parts of this agreement shall be held illegal or null and void by any court or administrative body of competent jurisdiction, such determination shall not affect the remaining parts of this agreement and they shall remain in full force and effect as if such part or parts determined illegal or void had not been included.

#### 10. NOTICE TO US GOVERNMENT END USERS

The Software is a "commercial item," as that term is defined at 48 C.F.R. 2.101 (October 1995), consisting of "commercial computer software" and "commercial computer software documentation," as such terms are used in 48 C.F.R. 12.212 (September 1995). Consistent with 48 C.F.R. 12.212 and 48 C.F.R. 227.7202-1 through 227.7202-4 (June 1995), all U.S. Government End Users shall acquire the Software with only those rights set forth herein.

YOU ACKNOWLEDGE THAT YOU HAVE READ THIS AGREEMENT, UNDERSTAND IT, AND AGREE TO BE BOUND BY ITS TERMS AND CONDITIONS. NEITHER PARTY SHALL BE BOUND BY ANY OTHER STATEMENTS OR REPRESENTATIONS THAT ARE INCONSISTENT WITH THE TERMS AND CONDITIONS OF THIS AGREEMENT. NO AMENDMENT TO THIS AGREEMENT IS EFFECTIVE UNLESS WRITTEN AND SIGNED BY PROPERLY AUTHORIZED REPRESENTATIVES OF EACH PARTY. BY DOWNLOADING, INSTALLING OR USING THE SOFTWARE YOU AGREE TO ACCEPT THE TERMS OF THIS AGREEMENT.

## Conventions used in this document

In this document several conventions for source code, filenames, application names, commands and user input are used:

Source code is printed like this. Default terms in source code examples, which has to be adapted by users, are printed the same but in brackets, like [this]

*Filenames and folder names are printed like this.*

**Commands are printed like this.**

Commands that have to be executed as root are preceded by a '#' character.

Commands that can be executed as user are preceded by a '\$' character.

**Application names are printed like this.**

In this Document the word 'driver' is used as a summarizing term for PPD files, a set of a PPD file and a filter or other driver related files. It is used whenever the exact type of driver does not matter.

## Description

This document describes the features, requirements and restriction of the Konica Minolta drivers for use. It also contains the installation instructions.

The KONICA MINOLTA BEU CUPS Driver that comes with this package will provide security related features like Secure Print, Authentication, etc...

The driver consists of PPD files for each product and a Perl based filter. The PPDs will use custom input fields to allow the user to enter username, password, etc. as free text.

The PPD files are designed as Multilanguage versions. The language will follow the "locale settings" of the system or application. If the language is not included in the PPD, English will be used as default.

Currently supported languages: English, French, Italian, German and Spanish

*Print dialog with custom inputs:*

The screenshot shows the 'Print' dialog box with the 'Advanced' tab selected. The 'Output Method' section is highlighted with a red dashed border and contains the following fields:

- Output Method: Secure Print (dropdown)
- Secure Print ID: secid (dropdown)
- Secure Print Password: [masked] (password field)
- Box Number: None (dropdown)
- File Name: None (dropdown)

The 'Account Track' section is also highlighted with a red dashed border and contains the following fields:

- Account Track
- Department Code: None (dropdown)
- Password: [masked] (password field)

The 'User Authentication' section is visible at the bottom but empty. At the bottom of the dialog are three buttons: 'Print Preview', 'Cancel', and 'Print'.

## Features

- Secure Print
- BoxPrint
- ID&Print
- SafeQ (support for using different user name)
- Authentication
- PSES Authentication
- AccountTrack
- CopySecurity
- Date/Time Stamp
- Page Number Stamp
- page logging in CUPS

## Requirements

- Common Unix Printing System (CUPS) version 1.3 or higher
- Perl Interpreter (in most Linux distributions already installed by default)

## Restrictions

Custom input fields are not supported by all applications. Most GTK Applications can handle it, whereas for example OpenOffice has its own printer settings dialog which does not support custom inputs. A workaround for these cases is described later in this document.

## Installation

### Restart the CUPS server

During the installation it will be necessary to restart the CUPS server.  
(root privileges are needed here)

Restart the CUPS server with the command:

```
# /etc/init.d/cups restart
or
# /etc/init.d/cupsys restart
or
# service cups restart
or
# /etc/rc.d/rc.cups restart
```

This command might vary depending on the Linux distribution used.

## Automatic Installation

This Konica Minolta driver package for CUPS contains an install script for automatic installation. This script will install all needed files, PPD files and the filter, to the designated CUPS folders and applies the required permissions.

To use the install script and the filter a working Perl interpreter has to be installed.

The interpreter binaries are considered to be installed as */usr/bin/perl*. This is the default location on most systems. If it is installed in another location on your system, please adapt the first line of the install script to fit your needs. Several settings, such as directory and path names are parsed out of the file */etc/cups/cups-files.conf* or */etc/cups/cupsd.conf* directly by the install script.

1. Extract the driver package  
To extract the driver package open a terminal, such as **xterm** or the **KDE terminal**.  
Extract the package with the command:  

```
$ tar -xvzf [package.tgz]
```
2. Call installation script (root privileges are needed here)  
Inside the new directory execute the command:  

```
# ./install.pl
```
3. Restart the CUPS server  
See "Restart the CUPS server"
4. Driver installation finished  
The driver installation is finished. Printers can now be installed using the CUPS web interface or any CUPS printer administration tool.

## Manual Installation

The files provided with the CUPS driver package can also be installed manually.

It is not enough to install only the PPD files, also installation of the filter is necessary to use the KM specific functions of the driver.

### A. Install the PPD file

Installation of the PPD file is working correspondent to any other PPD file.

1. Extract the driver package  
To extract the driver package open a terminal, such as **xterm** or the **KDE terminal**.  
Extract the package with the command:  

```
$ tar -xvzf [package.tgz]
```
2. Copy the PPD files to the CUPS PPD directory  
The default folder on most Linux distributions is  
*/usr/share/cups/model*  
In some distributions following folders may be used  
*/usr/share/ppd/custom*  
or  
*/usr/share/foomatic/db/source/PPD/Custom/*

Otherwise the path can be found in CUPS configuration file */etc/cups/cups-files.conf* or */etc/cups/cupsd.conf*  
The `DataDir` directive will point to a location, where to find a sub folder the model files.

After copying make sure the permissions of the files are set to 644.

## B. Install the filter

Root privileges are required to copy the filter files (*KMbeuEmpPS.pl* and *KMbeuEnc.pm*).  
The default folder on most Linux distributions is `/usr/lib/cups/filter`.

Otherwise the path can be found in CUPS configuration file `/etc/cups/cups-files.conf` or `/etc/cups/cupsd.conf`  
The `ServerBin` directive will point to a location, where to find a sub folder for the filter files.

After copying make sure the permissions of the files are set to 755.

## C. Restart CUPS

See “Restart the CUPS server”

The driver installation is finished. Printers can now be installed using the  
CUPS web interface or any CUPS printer administration tool.

## Add printer to CUPS

After the driver has been installed and CUPS has been restarted, a printer can be added to the system. The correct PPD files of this driver package can be identified by the “BEU” in the model name.

The screenshot shows the 'Add Printer' web interface. The browser address bar is `localhost:631/admin`. The page title is 'Add Printer - CUPS 1.5.3 - Iceweasel'. The navigation menu includes 'Home', 'Administration', 'Classes', 'Online Help', 'Jobs', and 'Printers'. The main content area is titled 'Add Printer' and contains the following fields:

- Name:** C364
- Description:**
- Location:**
- Connection:** socket://XXXXXX:9100
- Sharing:** Do Not Share This Printer
- Make:** KONICA MINOLTA (with a 'Select Another Make/Manufacturer' button)
- Model:** A dropdown menu is open, showing a list of models. The selected model is 'KONICA MINOLTA 652/602SeriesPS(P)BEU v1.0 (en, fr, it, de, es)', which is highlighted with a red dashed box. Other models in the list include 'KONICA MINOLTA 750/600 PS(P) (en)', 'KONICA MINOLTA 1050 PS(P) (en)', 'KONICA MINOLTA bizhub C35 PPD BEU v1.0 (en, fr, it, de, es)', 'KONICA MINOLTA C250 PS(P) (en)', 'KONICA MINOLTA C252 PS(P) (en)', 'KONICA MINOLTA C351 PS(P) (en)', 'KONICA MINOLTA C352/C300 PS(P) (en)', 'KONICA MINOLTA C360SeriesPS(P)BEU v1.0 (en, fr, it, de, es)', and 'KONICA MINOLTA C364SeriesPS(P)BEU v1.0 (en, fr, it, de, es)'.
- Or Provide a PPD File:** (with a 'Browse...' button)
- Add Printer** (button)

At the bottom of the page, a footer states: 'CUPS and the CUPS logo are trademarks of Apple Inc. CUPS is copyright 2007-2012 Apple Inc. All rights reserved.'



### Updating previously installed driver package

Updating the previously installed drivers requires following steps:

#### Install the PPD files and filter to its destination folder following the “Restart the CUPS server

During the installation it will be necessary to restart the CUPS server.  
(root privileges are needed here)

Restart the CUPS server with the command:

```
# /etc/init.d/cups restart  
or  
# /etc/init.d/cupsys restart  
or  
# service cups restart  
or  
# /etc/rc.d/rc.cups restart
```

This command might vary depending on the Linux distribution used.

1. Automatic Installation” or “Manual Installation” procedure above (confirm the overwriting of existing files)

Restart CUPS if not already done (See “Restart the CUPS server”)

2. Update already installed printers if necessary, to use a new installed PPD.  
(e.g. using CUPS web interface >> Administration >> Modify Printer)

### Un-installing driver package

To remove the driver package from the system, perform following steps:

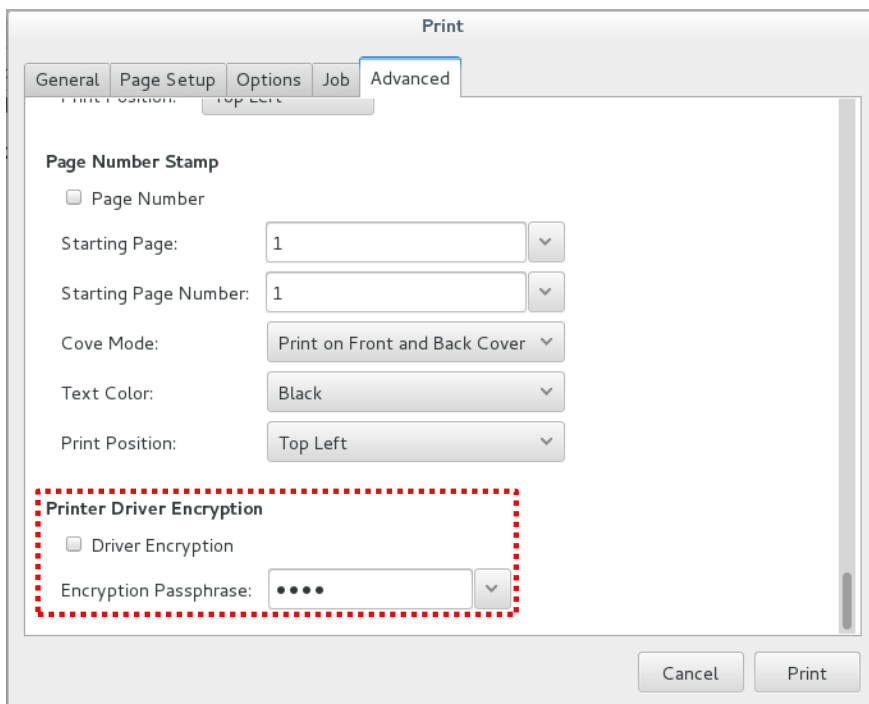
1. Delete installed printers which using the driver package.  
(e.g. using CUPS web interface >> Administration >> Delete Printer)
2. Delete the PPD files from the CUPS PPD directory  
The default folder on most Linux distributions is */usr/share/cups/model*  
The PPDs from the driver package are named “*KMbeu ... ux.ppd*” or “*beu ... ux.ppd*”
3. Delete the filter file from the CUPS filter directory  
(root privileges are needed)  
The default folder on most Linux distributions is */usr/lib/cups/filter*.  
The filter file from the driver package is named “*KMbeuEmpPS.pl*”
3. Restart CUPS  
See “Restart the CUPS server”

## Printer Driver Encryption

With the Linux driver, password data for Authentication, Account Track and Secure Print will be embedded in the print data as clear text. The default encryption passphrase is not published, so we cannot use it for the Linux driver. With the printer driver encryption function, the passwords will be encrypted using a custom passphrase to generate the encryption key.

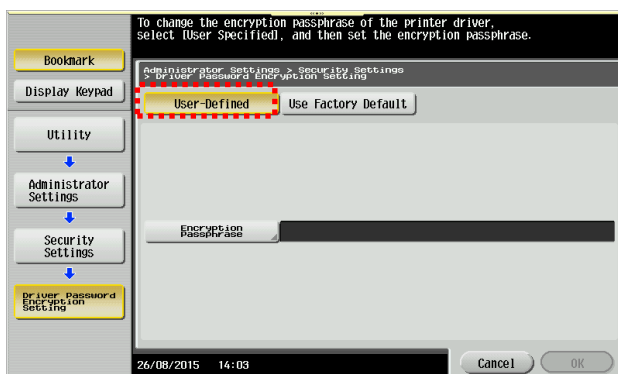
As of today, only the A3 devices support the use of a custom passphrase.

For devices that support printer driver encryption, the function can be enabled in print dialog or set within the default options. The passphrase must be 20 characters in length.

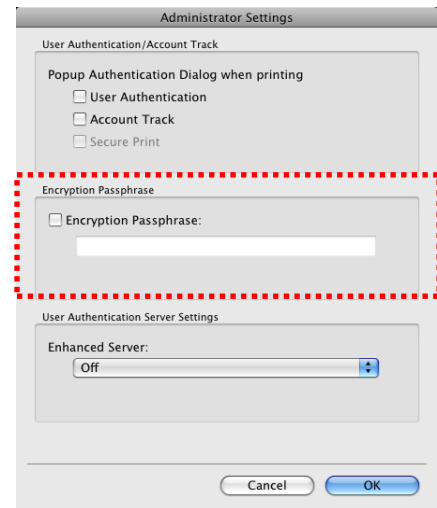
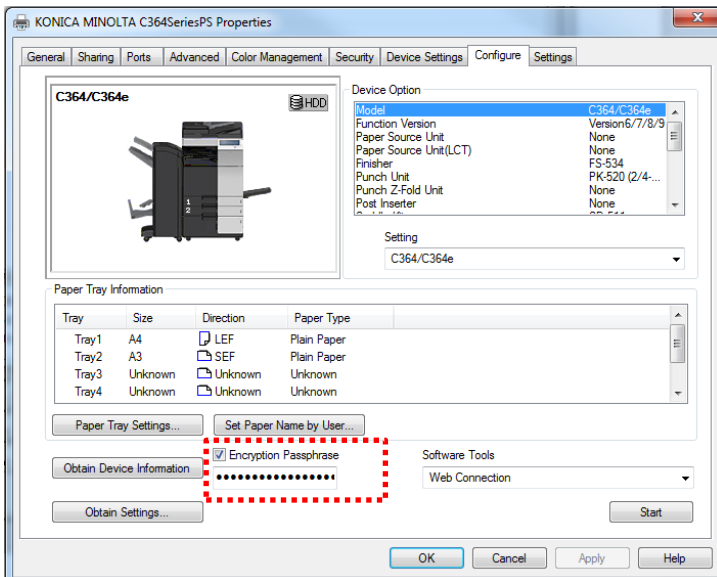


Note: When using the settings file as described in workaround 1, the same passphrase will be applied to all printers which support driver encryption.

The custom passphrase must also be enabled within the device. The settings can be found here: Utility >> Administrator Settings >> Security Settings >> Driver Encryption Password Settings



When using the same devices with other OS, also those printer drivers need to be configured to use the custom encryption passphrase. Otherwise printing may fail as these drivers use the “Factory Default” passphrase.



## Security Considerations

With the printer driver encryption setting, the passwords used for Authentication, Account Track and Secure Print will be encrypted before they are embedded in the print data. This does not secure the print data itself and it is still possible to capture and read the print data (e.g. using a network sniffer).

For secure transport it is recommended to use a secure printing protocol (IPP over SSL) or secure the whole communication with the printer by using IPsec.

## Workaround

... for applications that do not support custom input fields in their printer driver dialog.

### Workaround 1

The filter contains additional code to read from a settings file named *KMdrv.txt* which is located in the user's home folder. It is expected that the home folder name matches the username which is transferred to CUPS.

To enable this function the filter (*KMbeuEmpPS.pl*) needs to be modified. Following lines need to be changed and verified:

```
# my $usesettingsfile=1;
# my $homefolderspath="/home";
```

Within the settings file following settings can be defined:

- OutputMethod
- SecurePrintID
- SecurePrintPassword
- BoxNumber
- BoxFileName
- SafeQUser
- AccountTrack
  - DepartmentCode
  - AccountPassword
- Authentication
  - AuthenticationUsername
  - AuthenticationPassword

The settings file is an ASCII text file, which contains lines for each setting in the format:

```
option=value
```

For example: to enable Secure Print, with Secure Print ID=secid and password=pass the settings file has to contain these lines.

```
OutputMethod=Secure
SecurePrintID=secid
SecurePrintPassword=pass
```

Or alternative the output method can be selected in the print dialog, and then only the SecurePrintID and SecurePrintPassword are required to be defined in the file.

A sample settings file *KMdrv.txt* listing all possible parameters is included in this driver package.



#### Attention!

**If this function is enabled and the settings file exists in the user's home folder, the settings from that file will override the settings made in the printer dialog.**

**These settings will be applied to all printers that use the filter from this driver package.**

After modifying the filter file, it might be necessary to restart the CUPS demon (See "Restart the CUPS server").

#### Limitations:

**Not all Linux distributions or CUPS versions allow the filter to access external files. So in some cases the workaround will not work.**

**This workaround cannot be used with printers shared from another Linux CUPS system.**

## Workaround 2

Modify the PPD file for each printer and add the required value as additional parameter. Depending on the syntax, the additional parameters will be shown different in the printer dialog.

The PPD files for the installed printers are located by default in the folder `/etc/cups/PPD`

```
*KMSecID [SecurePrint ID]/[Displayed Text]: " "
```

This will show the [Displayed Text] in the print dialog, but will use [SecurePrint ID] as value for the filter. This syntax can be used if the real value should be hidden in the print dialog, e.g. for setting passwords in PPD file.

```
*KMSecID [SecurePrint ID]: " "
```

This will use the [SecurePrint ID] for display in the print dialog and as value for the filter. With this syntax, the used value is also the text displayed in the print dialog.

Following sample code shows the additional added parameters (lines in red colour) for individual Secure Print ID and password:

```
*% =====
*%  Secure Print ID
*% =====
*OpenUI *KMSecID/Secure Print ID: PickOne
*OrderDependency: 10 AnySetup *KMSecID
*DefaultKMSecID: None
*KMSecID None: " "
*KMSecID secid/private: " "
*CloseUI: *KMSecID

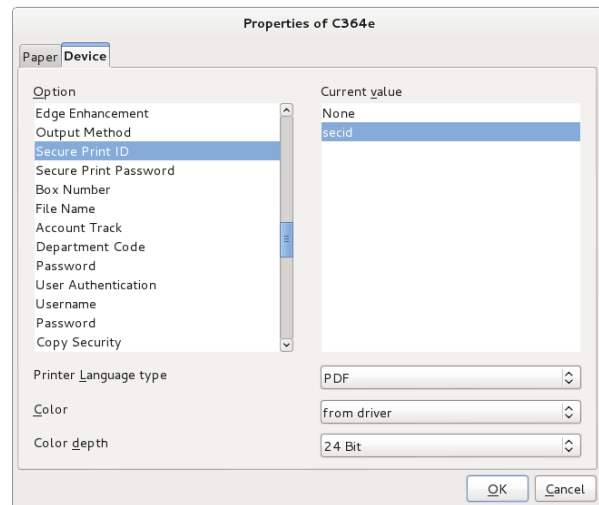
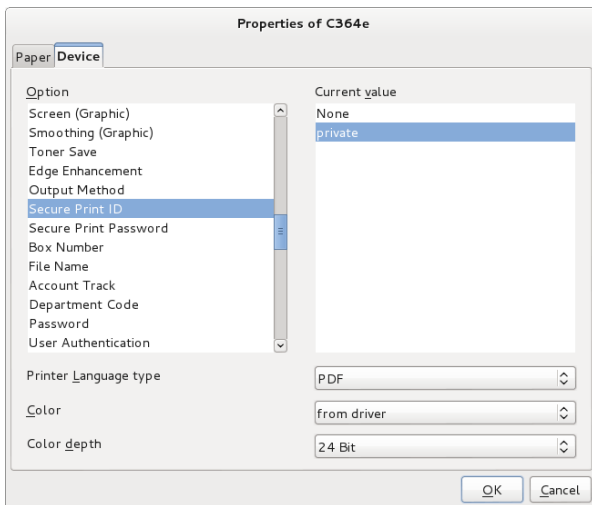
*% Custom PostScript KMSecID option
*CustomKMSecID True: " "
*ParamCustomKMSecID Username: 1 string 1 16

*% =====
*%  Secure Print password
*% =====
*OpenUI *KMSecPass/Secure Print Password: PickOne
*OrderDependency: 10 AnySetup *KMSecPass
*DefaultKMSecPass: None
*KMSecPass None: " "
*KMSecPass pass/private: " "
*CloseUI: *KMSecPass

*% Custom PostScript KMSecPass option
*CustomKMSecPass True: " "
*ParamCustomKMSecPass Password: 1 password 1 8
```

After modifying the PPD, it might be necessary to restart the CUPS demon (See “Restart the CUPS server”).

Print dialog from OpenOffice:



Added parameter:

\*KMSecID secid/private: " "

\*KMSecID secid: " "

In both cases "secid" will be the value used as SecurePrint ID, but the displayed text is different.

## Comparison Workaround 1 and 2

Workaround 1	Workaround 2
<p>Setting will be applied to printers using this driver</p> <p>Individual settings for each user.</p> <p>Selections in the print dialog have no influence on the settings defined in the setting file.</p> <p>Easy to handle, each user can modify the settings file and define its own values.</p> <p>Some Linux distributions or Cups versions do not support reading from a file. So this workaround cannot be used.</p> <p>This workaround only works in local environment not in client-print server environment.</p>	<p>Setting is only available for to modified printer PPD needs to be modified for each printer.</p> <p>Changes made in the PPD are available for all users.</p> <p>The customer can select among the different parameters/values defined in the PPD.</p> <p>For normal user it is difficult to make the changes in the PPD, also root credentials are required for the change.</p>

## Supported Products

### Konica Minolta:

- bizhub 423 series (223/283/423/283)
- bizhub 652 series (652/602/552/502)
- bizhub 554e series (554e/454e/364e/284e/224e)
- bizhub 754 series (754/654/754e/654e)
- bizhub 958 series (367/287/227/958/808/758)
- bizhub C360 series (C220/C280/C360)
- bizhub C652 series (C652/C602/C552/C502)
- bizhub C364 series (C224/C284/C364/C224e/C284e/C364e)
- bizhub C554 series (C554/C454/C554e/C454e)
- bizhub C754 series (C754/C654/C754e/C654e)
- bizhub C368 series (C368/C308/C258/C287/C227)
- bizhub C3850 series (C3350/C3850)
- bizhub 4750 series (4050/4750)
  
- bizhub C35 (only with special firmware)

### Generic:

- 42BW-4 series (22BW-4/28BW-4/42BW-4/28BW-4)
- 65BW-3 series (65BW-3/60BW-3/55BW-3/50BW-3)
- 55BW-5e series (55BW-5e/45BW-5e/36BW-5e/28BW-5e/22BW-5e)
- 75BW-5 series (75BW-5/65BW-5/75BW-5e/65BW-5e)
- 95BW-9 series (36BW-8/28BW-8/22BW-8/95BW-9/80BW-9/75BW-9)
- 36C-1 series (36C-1/28C-1/22C-1)
- 36C-6 series (36C-6/36C-6e/28C-6/28C-6e/22C-6/22C-6e)
- 55C-6 series (55C-6/55C-6e/45C-6/45C-6e)
- 60C-6 series (60C-6/60C-6e/60C-7/60C-7e)
- 50C-2 series (50C-2/50C-3/45C-3/45C-4/45C-5)
- 36C-9 series (36C-9/30C-9/25C-9/28C-8/22C-8)
- C MF385-1 Series (C MF385-1 / C MF335-1)
- BW MF475-1 Series (BW MF475-1 / BW MF405-1)



## Change Log

2016-05-30 driver package v1.11

- added new models:
- bizhub C368 series (C368/C308/C258/C287/C227)
- 36C-9 series (36C-9/30C-9/25C-9/28C-8/22C-8)

2016-05-17 driver package v1.10

- added new models:
- bizhub 958 series (367/287/227/958/808/758)
- 95BW-9 series (36BW-8/28BW-8/22BW-8/95BW-9/80BW-9/75BW-9)

2016-03-23 driver package v1.9

- bugfix in filter

2016-01-04 driver package v1.8

- bugfix in filter

2015-09-30 driver package v1.7

- new function "printer driver encryption"

2015-08-11 driver package v1.6

- new install script
- added "External Server Authentication" setting
- changed default page size to A4
- added new models:
- bizhub 367 series (367/287/227)
- bizhub C368 series (C368/C308/C258)
- bizhub C3850 series (C3350/C3850)
- bizhub 4750 series (4050/4750)
- 36BW-8 series (36BW-8/28BW-8/22BW-8)
- 36C-9 series (36C-9/30C-9/25C-9)
- C MF385-1 Series (C MF385-1 / C MF335-1)
- BW MF475-1 Series (BW MF475-1 / BW MF405-1)

2014-08-20 driver package v1.5

- optimized filter: less memory usage
- additional code for using default settings when printing from non-GUI applications
- debug information will no longer be written to a separate file, but can be output to the cups error log
- fixed install script

2013-11-13 driver package v1.4

- added SafeQ support (using different user name)

2013-10-16 driver package v1.3

- added new models:
- bizhub 754 series (754/654/754e/654e)
- bizhub 554e series (554e/454e/364e/284e/224e)
- 75BW-5 series (75BW-5/65BW-5/75BW-5e/65BW-5e)
- 55BW-5e series (55BW-5e/45BW-5e/36BW-5e/28BW-5e/22BW-5e)

2013-08-23 driver package v1.2

- added PSES Authentication
- added "e"-models
- correction of translation strings for Generic supported products (Konica Minolta)
- bizhub 423 series (223/283/423/283)
- bizhub 652 series (652/602/552/502)
- bizhub 754 series (754/654)
- bizhub C360 series (C220/C280/C360)
- bizhub C652 series (C652/C602/C552/C502)
- bizhub C364 series (C224/C284/C364/C224e/C284e/C364e)
- bizhub C554 series (C554/C454/C554e/C454e)

- bizhub C754 series (C754/C654/C754e/C654e)
- bizhub C35 (only with special firmware)
- supported products (Generic)
- 42BW-4 series (22BW-4/28BW-4/42BW-4/28BW-4)
- 65BW-3 series (65BW-3/60BW-3/55BW-3/50BW-3)
- 75BW-5 series (75BW-5/65BW-5)
- 36-C1 series (36C-1/28C-1/22C-1)
- 36C-6 series (36C-6/36C-6e/28C-6/28C-6e/22C-6/22C-6e)
- 55C-6 series (55C-6/55C-6e/45C-6/45C-6e)
- 60C-6 series (60C-6/60C-6e/60C-7/60C-7e)
- 50C-2 series (50C-2/50C-3/45C-3/45C-4/45C-5)

#### 2013-03-27 driver package v1.1

Filter version 1.0.2

- ID&Print: public user when no authentication is set
- support for overwrite driver settings using a file in the users home folder
- PPD files
- multilanguage support (EFIGS)
- supported products (Konica Minolta)
- bizhub 423 series (223 / 283 / 423 / 283)
- bizhub 652 series (652 / 602 / 552 / 502)
- bizhub C360 series (C220 / C280 / C360)
- bizhub C652 series (C652 / C602 / C552 / C502)
- bizhub C364 series (C224 / C284 / C364)
- bizhub C754 series (C754 / C654)
- bizhub C35 (only with special firmware)
- supported products (Generic)
- 42BW series
- 65BW series
- 36-C1 series
- 36C-6 series
- 60C-6 series
- 50C2 series

#### 2012-09-06 driver package v1.0

- initial version
- supported features
- Secure Print
- BoxPrint
- Authentication
- AccountTrack
- CopySecurity
- Date/Time Stamp
- Page Number Stamp
- page logging (in cups)
- supported products
- bizhub 423 series
- bizhub C360 series
- bizhub C364 series
- bizhub C754 series
- bizhub C35 (only with special firmware)



**KONICA MINOLTA**

**Konica Minolta**  
**Business Solutions Europe GmbH**  
Europaallee 17  
30855 Langenhagen 🇩🇪 Germany  
Tel.: +49 (0) 511 74 04-0  
Fax: +49 (0) 511 74 10 50  
[www.konicaminolta.eu](http://www.konicaminolta.eu)