



PrintMulti

Quick start

Troubleshooting

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Introduction

The use of PrintMulti is based on a virtual printer (PrintMulti printer) and one or more "real" printers ("slave printers"). This also includes XPS, PDF, ... printers.

Not all printer drivers are suitable for the PrintMulti printer!

Working drivers should spool the print job in EMF format and even then sometimes problems occur, especially with newer Windows versions (Meanwhile there is also a rudimentary processing of spool files in RAW format).

The following brief instructions are based on the use of a tested driver. For more detailed information, please refer to the PrintMulti manual.

If you encounter problems, don't throw in the towel right away. This document contains a chapter with tips on error handling.

Here is a brief overview of all the important steps:

1. Install PrintMulti.
2. Install a version 3 driver (HP driver package from our homepage).
E.g.: "HP Color Laserjet 9500 PCL 5".
3. As port use a file port (e.g.: "*c:\temp\PrintMulti.prn*") and give the directory all rights for all users.
4. Assign "PrintMulti" as the print processor.
5. Rename the printer sensibly e.g. to "PrintMulti".
6. Start "*PrintManagement.msc*" and assign "Isolated" or "Shared" to the new driver.
7. Adjust the configuration file "*PrintMulti.ini*" and test the output to the PrintMulti printer.
8. The HP and Lexmark universal printer drivers have been found to cause problems if the PrintMulti printer is shared as a network printer and clients print to it. If necessary, use other printer drivers for the physical printers.

The simplest configuration file looks like this (you should keep the "*Common*" section with the log entries. In case of problems, adjust the output path for the log files if necessary.)

```
[Common]
; keep. if necessary change output path to
; LogFile=%ALLUSERSPROFILE%\PrintMulti\Log\DbgLog.csv

[TestPrinter]
Active=1
Printer=<physical printer>

[PrintMulti]
Active=1
PrintSelf=0
ActionPrint=Print;TestPrinter
```

How to detect that the print jobs are spooled in EMF format?

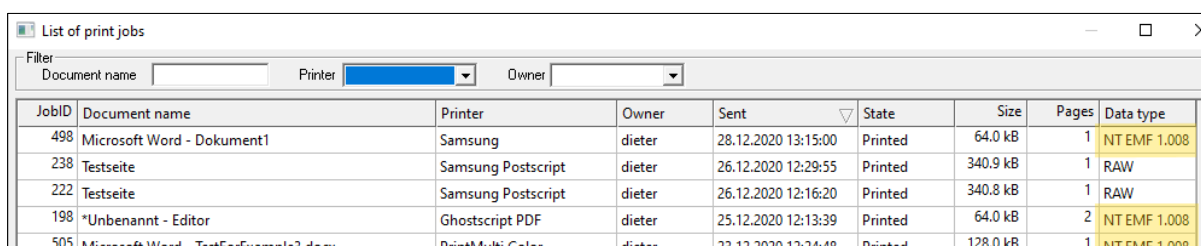
This can be detected very easily with SPLViewer. You can download a standalone version for 64 bit here:

<http://www.lvbprint.de/bin/current/SPLView64.exe>

You must either share the "*C:\Windows\System32\spool\PRINTERS*" with the current user or start the SPLViewer as administrator to be able to examine the print jobs.

In addition, you must specify in the advanced printer settings for the PrintMulti printer that the print jobs should not be deleted after printing. Alternatively the SPLViewer offers a possibility to configure this for certain printers with the shortcut "Ctrl+D".

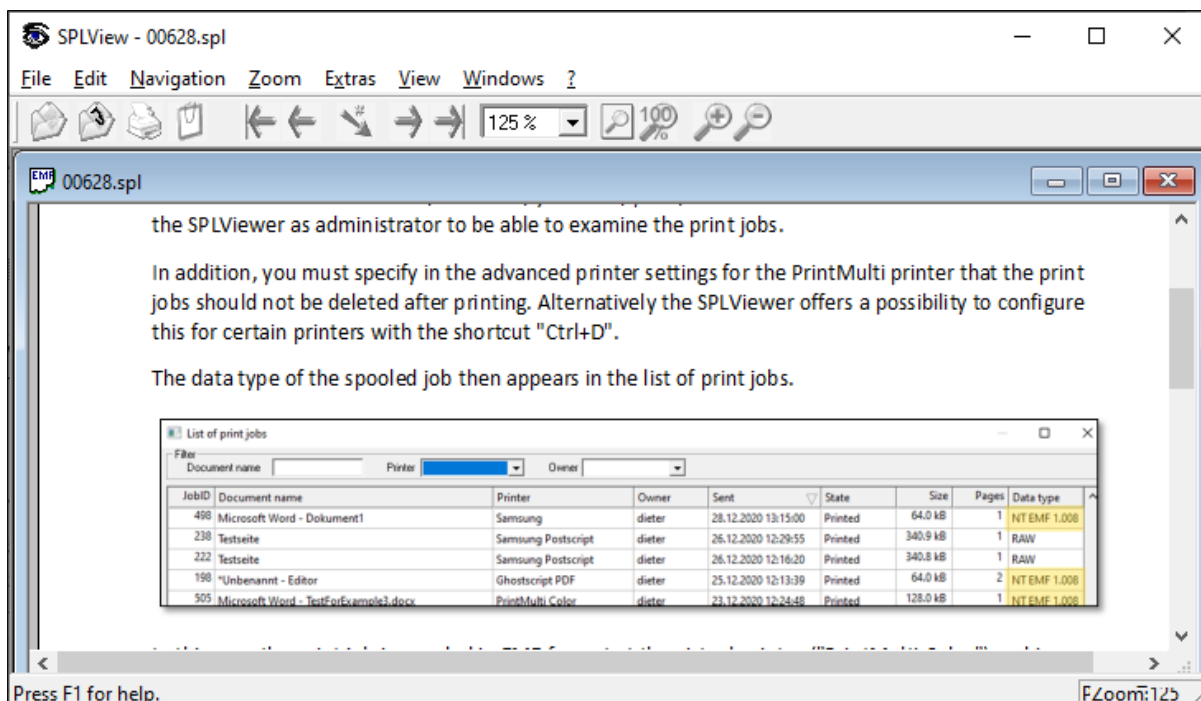
The data type of the spooled job then appears in the list of print jobs.



JobID	Document name	Printer	Owner	Sent	State	Size	Pages	Data type
498	Microsoft Word - Dokument1	Samsung	dieter	28.12.2020 13:15:00	Printed	64.0 kB	1	NT EMF 1.008
238	Testseite	Samsung Postscript	dieter	26.12.2020 12:29:55	Printed	340.9 kB	1	RAW
222	Testseite	Samsung Postscript	dieter	26.12.2020 12:16:20	Printed	340.8 kB	1	RAW
198	*Unbenannt - Editor	Ghostscript PDF	dieter	25.12.2020 12:13:39	Printed	64.0 kB	2	NT EMF 1.008
505	Microsoft Word - TestForExample3.docx	PrintMulti Color	dieter	23.12.2020 12:24:48	Printed	128.0 kB	1	NT EMF 1.008

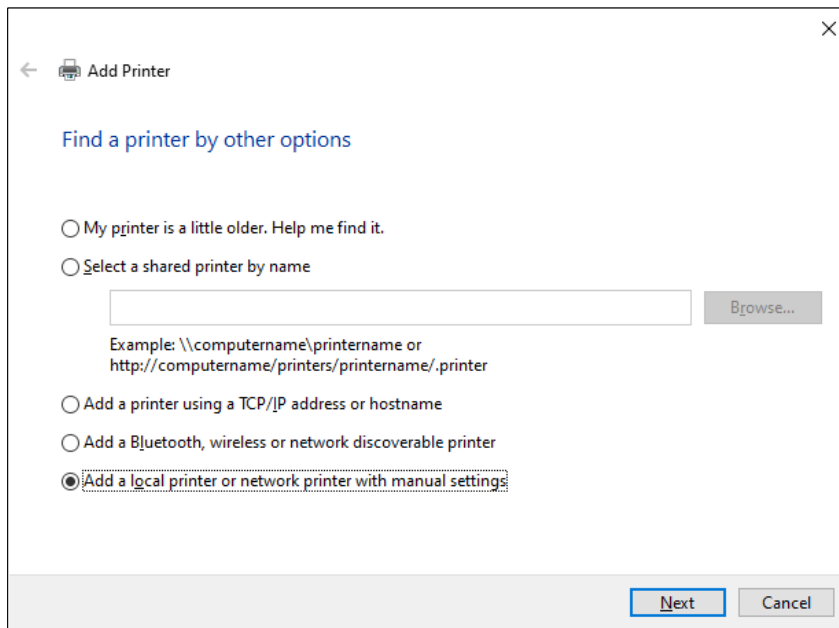
In this case the print job is spooled in EMF format at the virtual printer ("PrintMulti Color") and in RAW format at the slave printer ("TestPrinter").

You will appreciate the SPLViewer as a valuable help. With EMF jobs, you can also view the output graphically to see what was actually printed.



Installation and setup of a PrintMulti printer

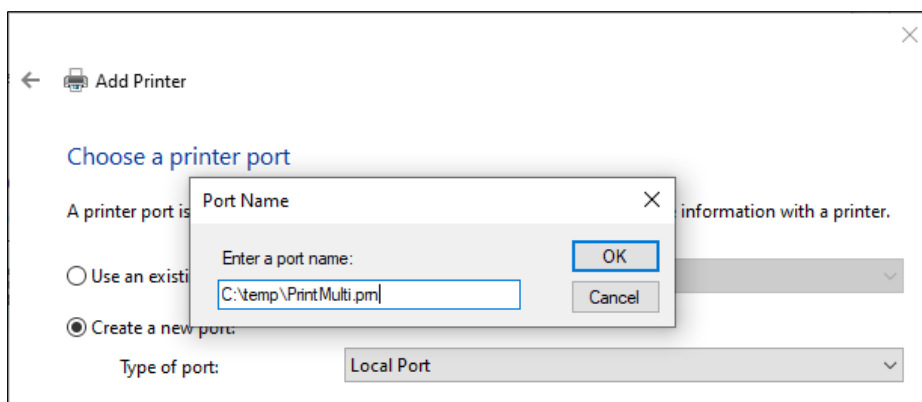
Install a "local or network printer with manual settings".



Port selection

In the next dialog, it is best to select a port that saves directly to a file. It makes sense to provide a separate file for each PrintMulti printer. The directory must exist.

You should give full access rights to the directory to the user "Everyone".



Printer driver selection

You need a printer driver that spools the job in EMF format. This is true for most drivers supplied with Windows up to and including Windows 7. Starting with Windows version 8/8.1, the situation has changed in the form of a new driver version (V4) that now spools in RAW format. We are not aware of any setting to persuade the new drivers to be compatible.

To have success with these operating systems, you have to fall back on the older version 3 drivers. These also seem to work fine with the newer Windows versions.

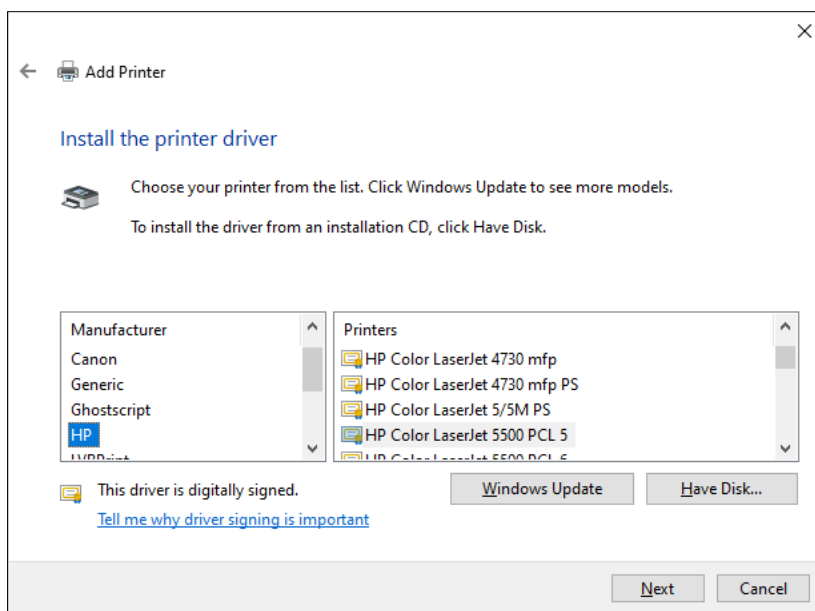
Where can I get version 3 drivers?

There are several possibilities for this

- 1) You are using one of the drivers from the archive of HP drivers available on our homepage (e.g. the HP Color Laserjet 9500 PCL 5).
- 2) You install a printer driver via the "**Windows Update**" function.
- 3) You are using one of the two "**PrintMulti Color/Mono**" drivers
- 4) You can also download entire driver packages. You can find more about it here: <http://support.microsoft.com/kb/323166/de>
- 5) Via "DriverStore" of a Windows XP / Windows 7 computer. (See also <http://support.microsoft.com/kb/952065/de>).

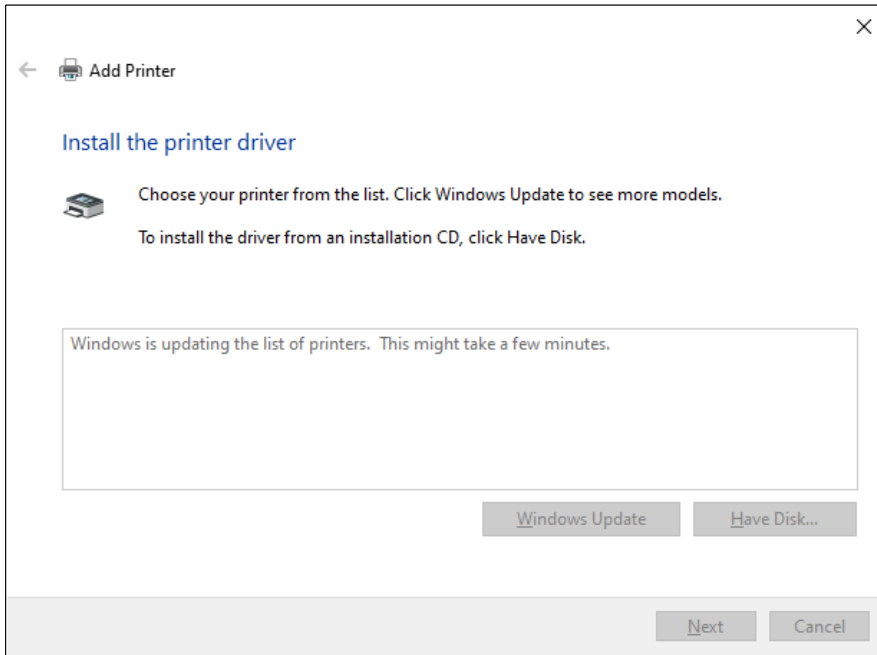
About "Windows Update"

After you have gone through the usual steps to install a new printer, the "Windows Update" function should be visible in the following dialog.



Windows 7 also offers the "Windows Update" dialog.

After that, you usually have to be very patient. As Microsoft indicates, it can actually take a few minutes until the list is updated.



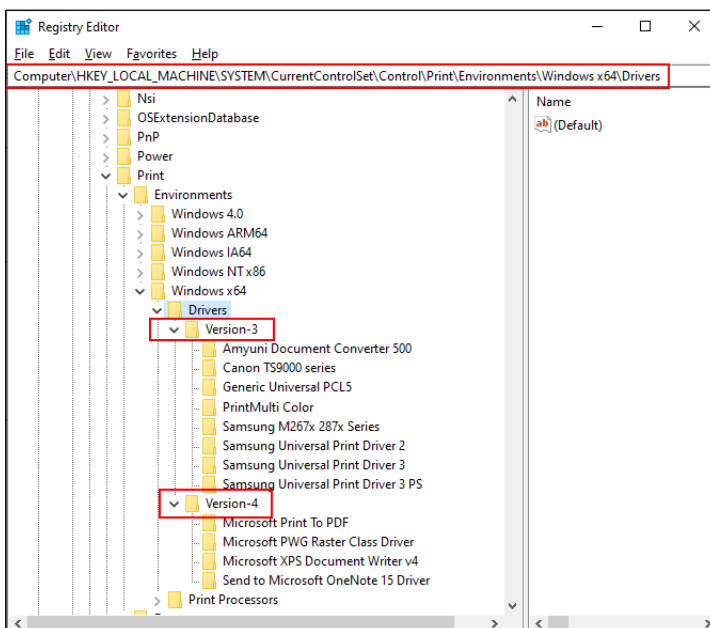
If the printer list does not show up even after quite some time, the Windows Update function might be corrupted.

This was indeed the case in our tests as well. The solution came from a tip on the Internet:

- Stop Windows Update Service
- Delete or better rename directory "c:\Windows\SoftwareDistribution
- Restart Update Service and try again.

Then select a driver from the list and install a printer as usual.

If necessary, you can check the registry to see if you have caught a correct driver.

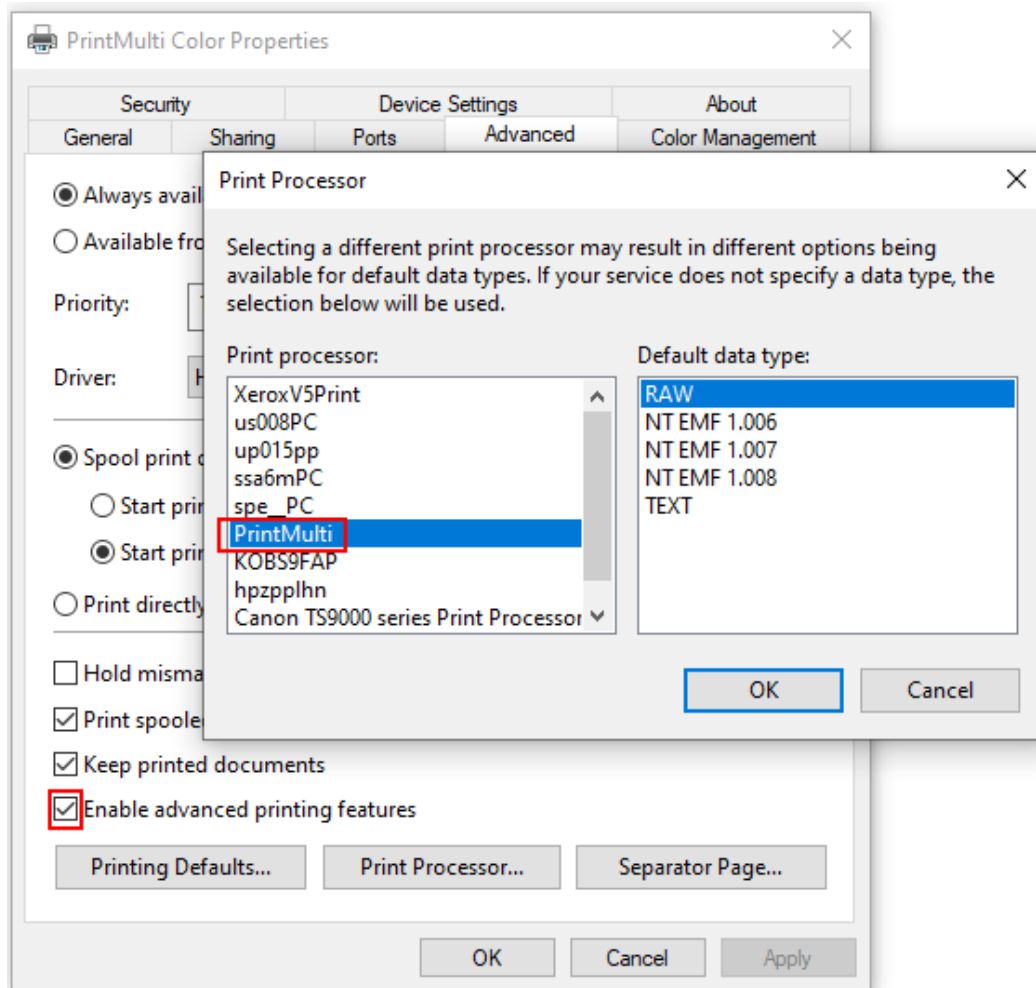


PrintMulti Color/Mono

On our homepage you will find a printer driver for mono - and one for color printers based on an old HP Laserjet printer (32 and 64 bit).

More settings

Now you only have to assign the print processor at the advanced settings for the PrintMulti printer. The "Advanced Print Features" must be active, otherwise print jobs will be generated in RAW format. The default data type does not seem to have any effect.



Driver isolation using "PrintManagement.msc" must be set to "Isolated" or "Shared", otherwise rights problems may occur, especially when printing to a file for further use.

PDF Architect 7 Driver	Windows x64		None		DIETER-LENOV...
PDF24	Windows x64		None		DIETER-LENOV...
PDFCreator	Windows x64		None		DIETER-LENOV...
PrintMulti Color	Windows x64		Isolated	LVB	DIETER-LENOV... w
Samsung M267x 287x Series	Windows x64	3.13.12.5	Shared	Samsung	DIETER-LENOV... s
Samsuna Universal Print Driver 2	Windows x64	2.50.4.0	Shared	Samsuna	DIETER-LENOV... s

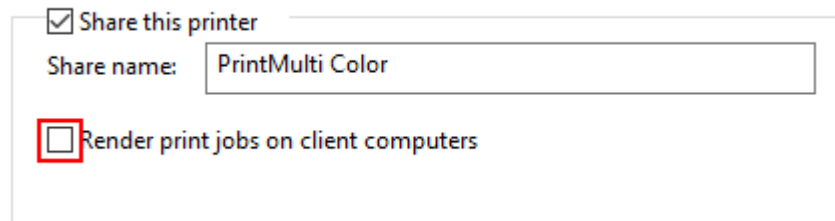
Now you can adjust the PrintMulti.ini (see introduction chapter) and start a first attempt.

If it doesn't work, then read on in the next chapter.

Enabling the PrintMulti printer

You can also share the PrintMulti printer. Please note the following:

- The "Print job preparation on the client computer" must be disabled



The screenshot shows a dialog box for printer sharing. At the top, there is a checked checkbox labeled "Share this printer". Below it, a text box labeled "Share name:" contains the text "PrintMulti Color". At the bottom, there is an unchecked checkbox labeled "Render print jobs on client computers", which is highlighted with a red square.

- Identical drivers must be installed on the client and server.
- If you are still using 32 bit clients, the correct 32 bit drivers must also be available on the server.
- You cannot print from shared clients to network printers via PrintMulti. You may need to install a network printer locally and then print directly to the TCP/IP port. Starting with version 2.0 you can also provide user credentials which also seems to work.
- In case of problems, first test if it works on the server. If it works there but not from a client, you probably need to adjust directory permissions - at least as a test. Here the directory with the printer port, the "*C:\Windows\System32\spool\PRINTERS*" and the "*C:\Windows\Temp*" directory may come into question. Otherwise, also try other drivers for the physical printers, preferably also version 3 drivers. Especially the universal drivers from HP and Lexmark seem to cause problems. PrintMulti redirects the "*C:\Windows\Temp*" as of version 2.0, so that no more problems should occur in this regard.

With the tool "icacls", which is included in Windows, rights can be saved in a file and reloaded if necessary.

e.g. `icacls C:\Windows\System32\spool\PRINTERS /save c:\temp\printers.acl` and
`icacls C:\Windows\System32\spool\ /restore c:\temp\printers.acl`.

Troubleshooting

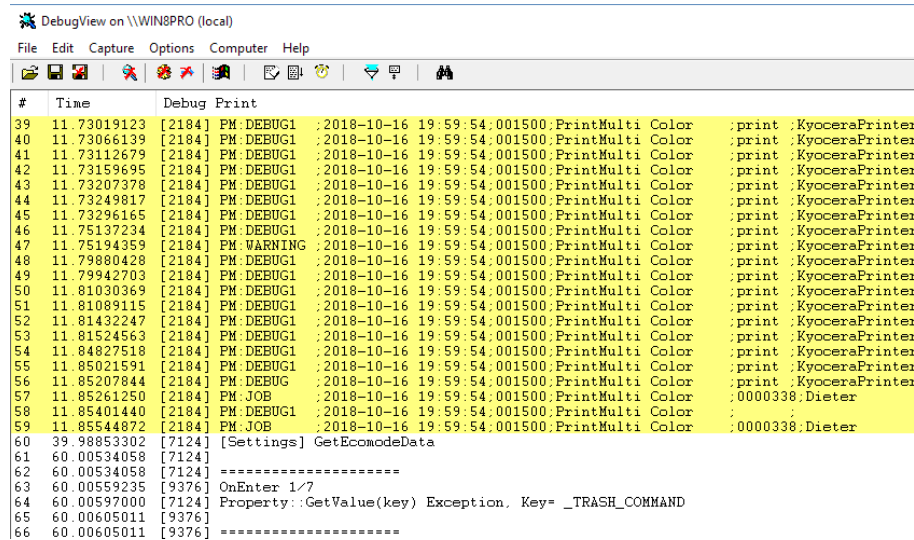
An important tool for error analysis is the log file generated by PrintMulti with the default configuration file ("*Common*" section).

If no log file is generated, then try to change the output path e.g. to
LogFile=%ALLUSERSPROFILE%\PrintMulti\Log\DbgLog.csv

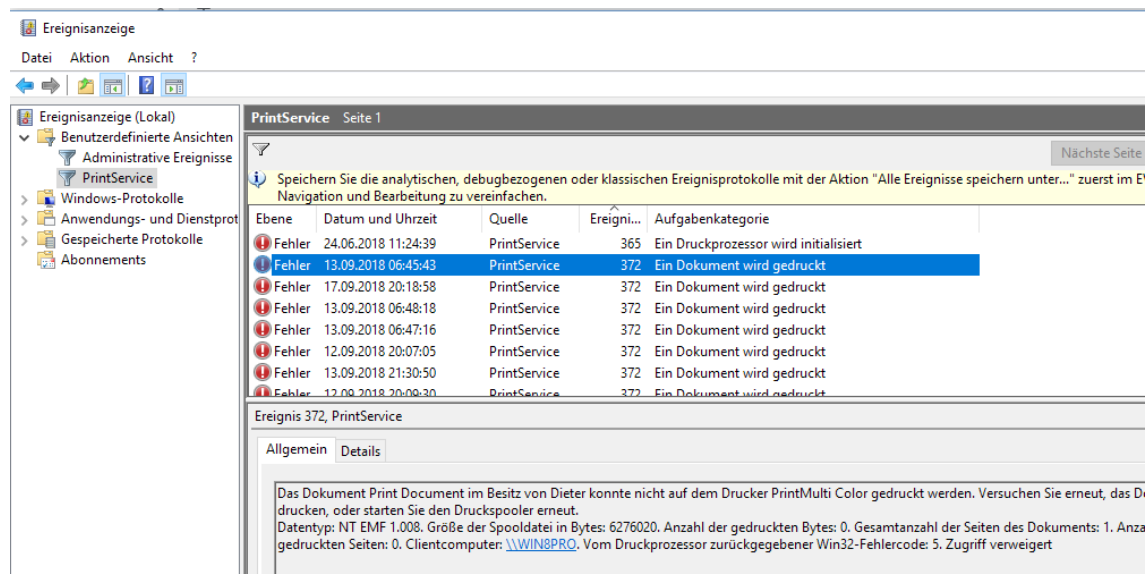
You can also view log outputs with the tool "DbgView" from Sysinternals and save them if necessary (switch "*DbgOutMask*" in the Common section of PrintMulti.ini)

To do this, start DbgView as administrator and select "*Capture Global Win32*".

The output could then look like this (the "PM:" for easy filtering will be available in the next PrintMulti version)



Error messages generated by Windows can be found in the Event Viewer in the "*PrintService*" section



Here now the most important points. Some you will find already above

- The printer drivers (not the printers themselves) must be configured to "Isolated" or "Shared" (PrintManagement.msc, see above)
- Use another driver for the PrintMulti printer (version 3 driver, see above). This is especially true if you find an error message with "RAW" in the log file
- The PrintMulti printer is normally configured to print fixed to a file. Each user must be given full rights for this directory.
- If you see a message in the event log *"Win32 error code returned by print processor: 183. A file cannot be created if it already exists"*, then extend permissions to the "C:\Windows\Temp" directory. The problem should no longer occur as of version 2.0 - at least for the temp directory
- Especially when printing to file from a printing client it can happen that the destination file is not created at all or with 0 bytes.
It has been found that some drivers (e.g. the HP drivers from the LVBPrint homepage) try to write to the "HKEY_USER" branch. This is not a problem in itself, but in the print environment "HKEY_USERS.DEFAULT" is accessed instead and Windows has not granted write permissions to this branch.
You can try to give write permissions to all users there.
"UseSystemAccount=1" seems to be possible too, but then the file belongs to the SYSTEM user.
- If local printing on a server works but printing from a client does not, try other printer drivers for the physical printers. Universal drivers in particular seem to cause problems.
- Test the setting ("*UseSystemAccount=1*") on the **slave printers**. Then it will be tried to print with the system account (this probably does not work on network printers). The setting often helps if the slave printer prints to a file for further processing (e.g. PDF archiving).
- Most of the problems are based on the Windows permissions. For example, the *"PrintIsolationHost"* process (used at the first point) has more rights than the original spooler process. Problems also seem to exist with access to the spool directory *"C:\Windows\System32\spool\PRINTERS"* and the *"C:\Windows\Temp"* directory. Try to succeed by sharing the directories as a test. Rights can also be backed up and restored to files with the icacls tool (see above).
- If everything does not help, you can also ask us for help via e-mail. Be sure to send the configuration file and the log file for this.