# SysPrint AG State of the Art printing





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# PSM Software Version 7.21 – 23<sup>rd</sup> of March 2020

#### Change: old style statistic date/time change

The old style statistic now contains the date and time of the last successful printer query instead of the date and time when the report was created.

#### Bug Fix: Secure LDAP (Ldap over SSL) is now working

The usage of windows user accounts using an AD or LDAP server now also works over SSL.

#### Bug Fix: Still multiple emails sent by the windows variant of PSM

The scheduler contained a bug, which could have cause multiple emails to be sent instead of just one. This was the case for any automated email: Orders, Alerts, Reports. The amount of emails was dependent on the time set in the scheduler. Multiple tasks have been started instead of just one. This is fixed now.

### PSM Software Version 7.20 – 12<sup>th</sup> of January 2020

#### **Enhancement: Report attachments selectable**

The attachments sent with the automatic default do a CSV and an XLS file, whereby the XML file is a html formatted file stored as xls, and recognised by Excel. However, we got recent reports that some newer mail server do no longer allow the xls attachments to pass through, and are blocked by the mail server. In most cases the whole email is blocked in this case, so not even the CSV file can pass through.

The reporting section has been changed to allow you to choose the attachment type. Please note that for existing reports, the CSV & XLS remains as default. So if you need to change these, you need to do it manually and store it.

	Value	
Query Name	My Report	Save Changes
Results by Email to: (eg. adm@xx.ch, user@xx.ch)	support@sysprint.ch	
Use report name as email subject		
Attachment		
IP Addross / Host Namo		

Enhancement: Printer links switchable to http or https

In the printer status view and in the consumable status view the printer ip addresses or host names are treated as links to allow you open up the embedded web server on the devices. Depending on the connection you make to psm (http or https) the links are using the same setting. You can now force the printer links to be http or https independently of the connection type you are using to connect to psm. To change the default behaviour, please use the scheduler settings GUI.

			automatic background processes!
1th Order sent at: (eg. 14:00) Interval of Email sending in Hours Only Orders for one Printer for each Email	14:00 24	Last run: 12-01-2020 14:01	Start Time and Interval of captured Orders. The starting Time can be setup individually, the Interval can be set from 5 Minutes to 300 Minutes (5 Hours). If you choose this Option, PSM will generate one Email for each Printer where there is something to order. If unchecked PSM will concatenate all Orders into a single Email (default).
Treat LOW toner status as xx %	10 % (1-30)		This affect the consumable status view sorting order only.
Printer Links	Site browsing default     http://     https://		Printer / Consumable view
Daily status email	<b>V</b>		



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#### Bug Fix: internal mailer debugging switched off

In the newer mailer introduced in Version 7.17 we have switched on debugging by default. This seems to have caused multiple mails sent for the orders and the reports. Even if we have never been able to reproduce this in the LAB we have now switched off debugging and only left it on in the mail testing section.

# PSM Software Version 7.19 – 24<sup>th</sup> of September 2019

#### Bug-Fix: HP E876xx and E778xx support for Staples and Toner Collection Unit

The original MIB values communicated and the values detected in practice did not match, which caused the feature, implemented in Version 7.18 not to work correctly. The newly detected return values have now been implemented.

#### **Change: Scheduler idle times / Windows Service Stop**

The PSM scheduler service starts the scheduler .php program, which is responsible to handle all automatic tasks inside PSM. The scheduler used an idle time of a little higher than one minute, to detect if there is work to be done, or if somebody changed the start time of a scheduled task. In practice, when somebody stops the PSM scheduler service (or during a system shutdown/reboot), it could take over one minute to stop the PSM scheduler service. We have been noticed that some systems which have software packages installed, which are controlling the installed services, thinks that the PSM scheduler service will not run properly, because it did not shutdown within the expected time, and prevented the PSM scheduler service to autostart when the system was rebooted. The scheduler now checks now at least every 20 seconds if there was a signal to allow faster stopping of the service.

# PSM Software Version 7.18 – 14<sup>th</sup> of July 2019

#### Enhancement: TLS V1.2 Support for emails - Enhanced status for email test

The PHP mailer has been changed to achieve the following:

- STRTLS is automatically being tried, even if not specified
- Mail servers which only support TLS 1.0 are not longer supported (TLS 1.0 is considered insecure)
- Mail servers which have only TLS 1.2 enabled are now correctly detected
- STRTLS will be tried by the mailer, even if not specified.
- A timeout of 30 seconds is now forced, if the email server is not reachable

Additionally, on the email setup page, we have enabled diagnostic to level 2 by default. If you click on the email test button and the test is not or only partially successful, enhanced diagnostic info will be shown. You can also further increase the diagnostic level to 4, by specifying :3 after the email server setup page. (eg tls:servername:587:4)

Limitations: older PSM Servers, which have PHP Version < 5.3 will not support TLS 1.2 and will also not support enhanced diagnostic info. They will continue to function "the old way".

#### Enhancement: HP E876xx and E778xx support for Staples and Toner Collection Unit

HP has implemented a better handling for the staples on their private MIB for the above-mentioned devices. In the private MIB's the status is now detectable as "OK", "LOW", "EMPTY". Printer profiles created after you have updated to Version 7.18 will already contain the special handling for those devices. The profile looks like this:



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Inteshold Levels for Ordens: If you Enter a value of Zero, the affected Part will be excludes from the Ordering Process. Inteshold Levels for Toner Service: If you you leave the Field Empty or Enter a 0, the affected Part will be excluded from the Notification.								
Part Number	Consumable Description	Threshold Value (%) (for Orders)	number of Successively carried out queries	Threshold Value (%) (Tonerservice)	Maximum Capacity	Printer MIB to retrieve the remaining Capacity		
V9050MC	Patrone Schwarz HP W9050MC	20	1	5	0	.1.3.6.1.2.1.43.11.1.1.9.1.1		
V9051MC	Patrone Cyan HP W9051MC	20	1	5	0	.1.3.6.1.2.1.43.11.1.1.9.1.2		
V9053MC	Patrone Magenta HP W9053MC	20	1	5	0	.1.3.6.1.2.1.43.11.1.1.9.1.3		
V9052MC	Patrone Gelb HP W9052MC	20	1	5	0	.1.3.6.1.2.1.43.11.1.1.9.1.4		
V9054MC	Trommel Schwarz HP W9054MC	20	1	5	0	.1.3.6.1.2.1.43.11.1.1.9.1.5		
V9055MC	Trommel Cyan HP W9055MC	20	1	5	0	.1.3.6.1.2.1.43.11.1.1.9.1.6		
V9055MC	Trommel Magenta HP W9055MC	20	1	5	0	.1.3.6.1.2.1.43.11.1.1.9.1.7		
V9055MC	Trommel Gelb HP W9055MC	20	1	5	0	.1.3.6.1.2.1.43.11.1.1.9.1.8		
V9058MC	Tonerauffangeinheit HP W9058MC	20	1	5	0	HPB%.1.3.6.1.4.1.11.2.3.9.4.2.1.4.1.10.7.17.0		
1G14A	Hefter 1 HP Y1G14A	20	1	5	0	HPB%.1.3.6.1.4.1.11.2.3.9.4.2.1.4.1.10.7.20.		
'1G13A	Hefter 2 HP Y1G13A	20	1	5	0	HPB%.1.3.6.1.4.1.11.2.3.9.4.2.1.4.1.10.7.21.		
r1G13A	Hefter 3 HP Y1G13A	20	1	5	0	HPB%.1.3.6.1.4.1.11.2.3.9.4.2.1.4.1.10.7.22.0		

The "HPB" String followed by an escape (%) and the private MIB will make the system to query the private MIB and handle the 3 different status codes represented by hexadecimal values.

For customers who already have a profile, we recommend to generate an additional profile by querying a printer:



Save the profile with a different name, such as "HP Color LaserJet Flow E87660-2" for example. (Please don't forget to add a reasonable "pages between 2 orders". 600 is definitely to low, we recommend to use 8000 at least.

Once you have created the additional profile, you can edit the existing one and copy over the content of the profile you just created.

Copy an existing profile HP Color LaserJet Flow E87660-2 Copy profile

When you're done, you can delete the new profile.

#### Bug-Fix: Develop B/W devices are reading the wrong serial number

Some of the black&white develop devices are based on Lexmark printers. Instead of reading the serial number which is noted on the device (the develop serial number) they are reading the Lexmark original serial number. This is because the engineering decided to store the develop serial number on a different MIB (a non-standard MIB). This behaviour will not be detected and the develop serial number will be retrieved.

#### Bug-Fix: Printer seems to be offline even if it is not

Some printers - in particular Xerox but also some others don't have anything at the public MIB (1.3.6.1.2.1.43.11.1.1.9.1.1) which should be the first consumable, usually the black toner or ink. PSM uses this MIB to verify if the device is reachable and in a good status to be gueried. We changed the behaviour and will now use the first MIB specified in the profile, if the standard MIB is empty.





# PSM Software Version 7.17 – 6<sup>th</sup> of March 2019

#### Enhancement: Import change

The "add printers" section now contains an additional entry called "Update import from CSV file". Other than the already known "Add new Printers by Import from a CSV File", it will import the CSV file and present a list of what will be changed, when you click on "save".

This list will look like in the example below and can also be exported.

Change Printer	Action	IP Address / Host Name	Printer Name	Contact Person	Location	Printer Model	Serial Number	Group1 Names	Group2 Names	Error Notificatio
Old Values:		prt051.sysprint.local	PRT051neu	Kontakt Person	Standort	HP LaserJet 500 MFP M525	VNDVFB30F0	G1	G2	TEST-SRV2012 Test
	U	prt051.sysprint.local	PRT051neu	New Contact	New Location	HP LaserJet 500 MFP M525	VNDVFB30F0	G1 🗸	G2 🗸	TEST-SRV2012 1
Old Values:		prt052.sysprint.local	PRT052	Mauri	Mauro Aggiato	HP LaserJet 500 MFP M525	JPBTB59J361	G1	G2	TEST-SRV2012 Test
	U	prt052.sysprint.local	PRT052	Hugo	Boss	HP LaserJet 500 MFP M525	JPBTB59J361	G1 🗸	G2 🗸	TEST-SRV2012 1
Old Values:		prt061.sysprint.local	PRT061	Fredy Nünlist		HP LaserJet 500 MFP M525	123	G1	G2	TEST-SRV2012 Test
	U	prt061.sysprint.local	PRT061	John	Lowfield	HP LaserJet 500 MFP M525	123	G1 🗸	G2 🗸	TEST-SRV2012 1
Old Values:		prt068.sysprint.local	prt068	persom	Lok	HP Designjet Z3100ps 44in Photo (44`` sized)	MY7B65C01R	G1	G2	TEST-SRV2012 Test
	U	prt068.sysprint.local	prt068	Urs	Chesterfield	HP Designjet Z3100ps 44in Photo (44`` sized)	MY7B65C01R	G1-New 🗸	G2 🗸	TEST-SRV2012 1
Old Values:										
	I	schueppr002.sysprint.local	prt069	New Contact	New Location	HP Color LaserJet Flow E67560	NLDVM2500G	G1-New 🗸	G2-New 🗸	TEST-SRV2012 1
	Sa	ave	Back		Excel					

Yellow backgrounded fields mean that there is a change compared to the database while green means that there is an additional new printer, which will be added. The Action column also displays more information about what will happen. If you move the mouse over the field, it will tell you more (such as U = Update, I = Insert).

As soon as you click on the "Save" button, the changes will be made and at the end a summary with the results will be shown. Depending on the amount of printers in the import file, this process could take a while.

#### Enhancement: Xerox C50 / C60 did not work

The above-mentioned Xerox models do not behave according to the SNMP RFC for printing standards! Usually the first consumable MIB starts with a 1. These models have two black toners, and instead of reporting the first one on the first MIB, it is reported at position 30. Additional programming needed to be implemented to detect this non standard behaviour. The printer model profile should now be created correctly and the printer queries should work.

#### **Bug fix: MIB browser utility**

The "Excel" button and the "email results" did not work on the MIB browser utility. This was due to a wrong path in the internal links of the program and has been fixed.







# PSM Software Version 7.16 – 22<sup>nd</sup> of January 2019

#### Internal

Internal Release only. No public changes.

# PSM Software Version 7.15 – 22<sup>nd</sup> of November 2018

#### Enhancement: Delete by import file

It is now possible to delete printers by importing a CSV file. You will find this under the "Printer Administration" menu. The import file has to contain at least the addresses or host names to be deleted in the first column. The addresses or hostnames have to match the ones in the PSM database. You will get a list of printers which will be deleted, after you imported the file, and you have to confirm the delete.

## PSM Software Version 7.14 – 1<sup>st</sup> of November 2018

#### Enhancement: Daily status mail now contains IP address of PSM

We have noticed, that the customers sometimes don't know the IP address of PSM, when it has been installed a while ago, especially when the small Raspberry PI variant is used. The daily status mail, which can be activated under the scheduler, will now also contain the IP address of PSM.

# PSM Software Version 7.13 – 21<sup>st</sup> of June 2018

#### Enhancement: Performance of dashboard reports increased in PSM Windows

Until now, the calculations needed to display the Dashboard reports were executed once a day and only when first used. On larger installation this created an unacceptable high delay for the first user opening the Dashboard. We have moved the calculations to the nightly batch jobs in order to prevent the wait time.

#### **Bug Fix: Automatic Backup incorrect in PSM Windows**

The Windows version of PSM did not do the automatic database backup correctly in some cases. Affected: All users which have automatic local backup activated.

#### **Bug Fix: Manual printer import**

The result of the manual printer import was not the same compared to the automatic printer import. The DNS resolution did not work as it does on the automatic import. The manual import program has been changed to match the automatic import.







# PSM Software Version 7.12 - 8th of May 2018

#### Enhancement: Reporting Section - Email subject can be set to report name

A checkbox field has been made available for you, allowing you to chose the query name (report name) to be used as the Email Subject. By default (if not selected) the default language specific title "supply and page counter report" will be used as the Email subject.

Define and Manage Reports and Evaluations 0

	Query Name	
Query Name	Consumables by device model - details	change/view
		Delete
	Value	
Query Name	Consumables by device model - details	Save Changes
Results by Email to: (eg. adm@xx.ch, user@xx.ch)		
Use report name as email subject		





# PSM Software Version 7.11 – 13th of March 2018

#### **Enhancement: Manual printers**

Some users requested to be able to add printers, which are not attached to the network. For this kind of printer entries, it should be possible to issue manual orders for consumables and also to manually update the page counters.

This is now possible. If a printer host/ip address is starting with "manual\_" or "manuell\_", it will be considered as a manual printer entry. The host name / ip address will not be queried and no communication with the printer will be made.



Users with the appropriate rights will be able to manually place an order and enter an order text. Upon the next automatic email order schedule, the order will be sent to the destination specified in the supplier group, and the date will be noted. Please note that the order status will be visible for 14 days after the part has been ordered, and the remaining capacity changes to "LOW". After 14 days the status will automatically change back to "OK" and the order date disappears.

1	Consumable Status Report								
	Consumables history and orders 🔍								
	Part Number	Consumable Description	Threshold Value (%) (for Orders)		Order sent Date	Remaining Capacity	Remaining Capacity ( % )	Maximum Capacity	Manual order / reason
1	CF300A	Black Cartridge 827A HP CF300A	0	M X	27-02-2018	LOW	n/a		manual order by steve
	CF301A	Cyan Cartridge 827A HP CF301A	0	N		ок	n/a		<b>•</b>
	CF303A	Magenta Cartridge 827A HP CF303A	0	N		ок	n/a		<b></b>

#### Page counter updates

In order to update the page counter, you will need to create a special profile. In this example it is named "HP Manuell":

Change Profile 💡

	Description		Value
	Profile Name		HP Manuell
1	Total Printed Pages		manuell
2	Total Pages in Color		manuell
3	Total Pages in Black and White		-1;::2
4			
5			
	Description		Value
31	TOTAL		-1
	TOTAL		-1
32	Total Color	_	-2

HP Manuell

You need to fill in "manual" or "manuell" for all fields which should be editable by the user. You can still use formulas to calculate some values. HP for example, does not have a black&white total. It needs to be calculated by subtracting the color from the total value.

The profile needs to be assigned to the manual printers

# Profile for the Query of Counters

Description	Pages
Total Printed Pages	2155
Total Pages in Color	200
Total Pages in Black and White	1955
TOTAL	2155
Total Color	200
Total Black	1955

In the printer detail view, the fields for which "manual" or "manually" was specified, the user can enter the values. All other fields will be calculated once you click on "save/refresh".

#### **Restrictions:**



The last status update will not be updated automatically. It will be updated only, if you click on "Save/Refresh" inside the printer detail view (i.e. when you place an order, or update the page counters).

Only admin and superusers have the rights to update page counters and place orders. In order to enable a normal user to place orders and to update the page counters, you will need to set the "manual orders" right to the user.

Manual orders 🗹 The user is allowed place an order by clicking on the order button in the device detail view.







# PSM Software Version 7.10 – 26th of January 2018

Bug Fix: Printer- and consumable overview no longer display monochrome hp devices as color

Some newer monochrome HP laserjet devices where shown as if they were color devices. This has been fixed.

Change: Auto-Import: Import file read in one piece instead of line by line

In order to prevent file locking, the import file is read in one piece at the beginning of the auto-import process. If an auto import file cannot be deleted for some reason after the import, the reason will now be logged to the syslog / eventlog for debugging.

#### **Bug Fix: Duplicate addresses in PRINTERS table**

This bug was introduced in version 7.06, when an additional key for the printer data table name has been added. The primary index (address) became non-unique by this. During auto-import duplicate printer names were possible because of this. The index has been put back to unique to prevent this.

# PSM Software Version 7.08 - 23rd of November 2017

#### Enhancement: Mail Queue - ALL emails can be deleted

A button has been added in the Mail queue view, which allows the administrator or superuser to delete all mails from the queue.

#### Bug Fix: "dontsend" on the error message or toner service group generated entries in the mail queue

Long ago we added the feature string "dontsend" or "logonly" on the error messages group and on the toner service group in the field for the email recipients. The intention behind this is, to have the messages logged but not sent to any recipients.

Later on, we added the mail queue feature in order to queue mails when they cannot be send because of the target email server is not ready for some reason. This has caused alerts with "dontsend" or "logonly" as recipients to be added to the mail queue. This caused the mail queue to be filled up with unwanted mails. This error has been corrected.

# PSM Software Version 7.07 - 8th of November 2017

#### Security Patch

A security warning reported by a user has been fixed. The issue addressed is a vulnerability that could result in PSM to be overloaded, to lose the admin default language for the GUI and to get multiple orders with the same order number for different printers. A reboot of PSM and setting the default language again was necessary to get PSM up and running again. Only installations with 500 and more printers and short query intervals were affected.

For security reasons we do not provide more information here.

We recommend to update PSM in order to avoid becoming a victim of an attack initiated by someone within your internal network.

#### Enhancement: Daily Testmail Subject can be set

The subject for the daily test mail can now be configured over the PSM scheduler. Also the xls attachment with the current printer status is no longer dependent on the filter set in the admin printer view and contains all printers.





# PSM Software Version 7.06 – 1st of November 2017

#### Enhancement: SNMP Parameters can also be specified at group 1 level

It is now possible to specify SNMP Values (both, read and write) at group 1 level.

- This allows to have different SNMP settings on different group1 grouped printers. The hierarchy is the following:
  - SNMP Settings specified at printer level 1)
  - 2) If not specified at printer level: SNMP Settings specified at group1 level
  - 3) If not specified at printer or group level: SNMP Settings specified at global level

Note: Since SNMP Write is not often used in PSM, the SNMP Write parameters at group1 level are only visible, if SNMP Write is enabled or set to "use group1" at global level.

#### **Enhancement: NSLOOKUP**

Sometimes the name resolution in PSM was very slow, especially on the windows edition of PSM. This was due to the fact, that inside PHP (the programming language of PSM) it is not possible to specify timeouts for DNS queries. We have changed the program to use the OS internal NSLOOKUP, which allows for timeouts. This has turned out to be much faster.

#### Change: Printer counter table names renamed

The internal name for the printer tables containing the daily page counters have been renamed. The names are now linked inside the printer table. Earlier on the printer counter tables were named according to the ip address or host name. Since the period (.) is not allowed for table names, PSM used the comma (,) for the naming. In some cases, especially when there was an IP address or host name change, this could lead to problems. In order to avoid that, PSM is using an internal naming, which will not change when the printer IP or host name changes.

#### Bug Fix: Raspberry PI3 did not start the job scheduler

On some PI3, the PSM scheduler responsible for the printer queries and batch jobs did not start. By applying this update, the PI3 gets updated at OS level to make the scheduler work. No further action is necessary.

#### Bug Fix: Subject in old style reporting emails was wrong

The language table was not included in the program responsible for the old style report generation. Therefore a part of the text was missing in the email subject. This has been corrected.







# PSM Software Version 7.03 – 1st of September 2017

#### Enhancement: AD/LDAP and general rights enhancements

Further enhancements have been made for the user management by ActiveDirectory / LDAP. The following groups have been added:

- PSMDeviceReboot: If PSM is configured with SNMP-write access and the user is assigned to this AD/LDAP group, he is allowed to reboot devices. This setting is also available in the local user management.
- PSMManualOrders: If the user is assigned to this AD/LDAP group, he is allowed to do manual consumable orders from the device detail view. This setting is also available in the local user management.
- PSMManualAlerts: If the user is assigned to this AD/LDAP group, he is allowed to manually trigger consumable replacement alerts from the device detail view. This setting is also available in the local user management.
- AD/LDAP Attribute for specific group restrictions:
  - You can now use one of the attributes "extensionAttribute1" "extensionAttribute15" in the user context, to define the PSM groups the user is allowed to access. The format is the following:
    - separates the different group types. The available group types are: " [ "
      - "Group-1:" The groups specified in group1
      - "Group-2:" The groups specified in group2
        - The groups specified in the error message notification groups
      - "Group-E:" "Group-T:" The groups specified in the toner/consumable replacement alert groups
      - "Group-S:" The groups specified in the consumable supplier groups
  - "•" The semicolon character separates the values within the groups.

#### Example:

If you want to restrict the user to Groups 1 "Printers Zurich" and "Printers Basel" and let the user only see printers which are assigned to consumable supplier "Consumable Shop Zurich", then you would specify:

!Group1: Printers Zurich; PrintersBasel !Group-S: Consumable Shop Zurich

#### AD / LDAP auto-login (PSM Windows only):

PSM now supports auto-login if AD/LDAP has been configured. The following requirements are needed / restrictions apply:

- 0 In IIS Management under authentication settings for the site "Default-Site>PSM": Disable anonymous authentication and enable Windows authentication.
- Restriction: The user "admin" is excluded from auto-login and AD/LDAP login, since the user "admin" is 0 a PSM local user only.
- Auto-login only works if the users are in the same AD/LDAP domain or in a subdomain which is 0 allowed to use windows authentication on the IIS.
- Login user format when using AD/LDAP authentication:
  - If a user suffix (for example @mydomain.local) has been specified in the AD/LDAP configuration 0 (which is recommended), PSM automatically assumes "userid@mydomain.local" if only the username is entered
  - If a user suffix has not been specified in the AD/LDAP configuration, the user need to enter the domain 0 in the form "userid@mydomain.local".
  - When using PSM in a multi-domain environment, we recommend to specify a service account in the top-level domain and use the top-level domain as the user suffix. (eg. @mycompany.net ) This will allow the users in the subdomains to login in two ways:
    - europe\userid : This will make PSM to add the suffix to the domain "europe" and will result in logging in using "userid@europe.mycompany.net"
    - Fully qualified: The user can directly specify the fully qualified username "userid@europe.mycompany.net"





#### Local user administration vs. AD/LDAP authentication

The following screenshots explain the dependence of the local settings and the LDAP groups.

User Administration 📀		
User Name		
steve V	Change / Copy User	
×	Delete User	
	Value	Description
User Name	steve	
Password		
Menu Language	German ¥	
Super User	1	A Super User has Admin Rights with the following Exceptions. General Administration Parameters, Linux Administration, Software Updates and Database Restore. All of the following Parameters have no Effect for the Super User
Printer Admin Rights	<b>☑</b> 2	The User may add, delete or change Printers within the selected Groups
Group Admin Rights	3	The User may add, delete or change Email Addresses within the selected Groups (Except for the Supplier Group)
Printer Profile Admin Rights	<b>☑</b> 4	The User may add, delete or change Printer Profiles. (Attention: Profile changes can affect the whole System!)
Counter Profile Admin Rights	☑ 5	The User may add, delete or change Page Counter Profiles. (Attention: Profile changes can affect the whole System!)
Error Profile Admin Rights	✓ 6	The User may add, delete or change Error Control Profiles. (Attention: Profile changes can affect the whole Systemt)
PSM Inventory	☑ 7	The User may use the PSM Inventory Feature. Please Note that the User can see all Groups while using the Inventory Menu.
Printer reboot	☑ 8	The user is allowed to reboot a printer. (This only works if SNMP write is enabled on the device and the global or local settings).
Manual orders	✓ 9	The user is allowed place an order by clicking on the order button in the device detail view.
Manual alerts	I I 10	The user is allowed to generate a consumable replacement atent by clicking on the atent button in the device detail view.
Group 1 Rights	ALL Test Gruppe 1 Test Gruppe 2 Test Gruppe 3	Select ALL, or select the Groups you want. Multiple Groups can be selected by holding the CTRL Key
Group 2 Rights	ALL Test GR2 Test ölü éàè ÖÄÜÉÀÉ	Select ALL, or select the Groups you want. Multiple Groups can be selected by holding the CTRL Key
Supplier Group Rights	ALL Sysprint AG Test Lieferant	Select ALL, or select the Groups you want. Multiple Groups can be selected by holding the CTRL Key
ALL Toner Service Group Rights Helpdesk BE Helpdesk ZH		Select ALL, or select the Groups you want. Multiple Groups can be selected by holding the CTRL Key

#### LDAP Authentication (optional)

	Permanent Settings	Remarks
Active		if the checkbox is checked, the LDAP / AD Access has been tested and verified.
AD / LDAP Servername or IP Address	domainserver.domain.local	Usually this is the Windows the Domain Controller (DC) Hostname
AD / LDAP Server Port Number	389	389 / 636 (SSL)
SSL		SSL Encryption
Service user account name	serviceuser	Service user account name with the right to query the AD / LDAP Server
Service user account password (already set)	•••••	Leave empty if already set
Base DN	DC=mycompany,dc=net	root searchpath for the retrieval of users (eg. CN=users,dc=mydomain,dc=local)
User suffix	@mycompany.net	Suffix for the Userid (eg. @mydomain.local). If not entered, the Users need to enter the full login eg. myuser@mydomain.local
AD/LDAP Group PSMSuperUsers	PSMSuperUsers 1	A Super User has Admin Rights with the following Exceptions: General Administration Parameters, Linux Administration, Software Updates and Database Restore. All of the following Parameters have no Effect for the Super User!
AD/LDAP Group PSMUsers	PSMUsers	Minimum rights (= all checkboxes unchecked in the local user administration
AD/LDAP Group PSMPrinterAdmin	PSMPrinterAdmin 2	+ The User may add, delete or change Printers within the selected Groups
AD/LDAP Group PSMDeviceReboot	PSMDeviceReboot 8	+ The user is allowed to reboot a printer. (This only works if SNMP write is enabled on the device and the global or local settings).
AD/LDAP Group PSMManualOrders	PSMManualOrders 9	+ The user is allowed place an order by clicking on the order button in the device detail view.
AD/LDAP Group PSMManualAlerts	PSMManualAlerts 10	+ The user is allowed to generate a consumable replacement alert by clicking on the alert button in the device detail view.
AD/LDAP Group PSMProfileAdmin	PSMProfileAdmin 4	+ The User may add, delete or change Printer Profiles. (Attention: Profile changes can affect the whole System!)
AD/LDAP Group PSMErrorAdmin	PSMErrorAdmin 6	+ The User may add, delete or change Error Control Profiles. (Attention: Profile changes can affect the whole System!)
AD/LDAP Group PSMCounterAdmin	PSMCounterAdmin 5	+ The User may add, delete or change Page Counter Profiles. (Attention: Profile changes can affect the whole System!)
AD/LDAP Group PSMGroupAdmin	PSMGroupAdmin 3	+ The User may add, delete or change Email Addresses within the selected Groups (Except for the Supplier Group)
AD/LDAP Group PSMLogistics	PSMLogistics 7	+ The User may use the PSM Inventory Feature. Please Note that the User can see all Groups while using the Inventory Menu.
AD/LDAP attribute for specific group restrictions	extensionAttribute15 11	Specific group rights specified in the AD attribute (choose from extension/Nthbute 1-15) Format T' sepantises the group type: "sepantates the group type from the values.", "sepantates the values (group names). Valid group types: Group-1, Group-2, Group-E, Group-E, Hapdesk 2H; Helpdesk BE Example: Group-1, ZunichBen T Group 2. MPP divises Group-1: Hapdesk 2H; Helpdesk BE
Enter user id to test the AD/LDAP Access	testuser	In order to activate the AD/LDAP Access you need to enter a user id and password to test the query
Password	•••••	Save and Test

Please note, that every user which successfully authenticates using AD/LDAP will be added to the local user list. You can add / assign groups to the user or additional rights. However the minimum rights will be set based on the AD/LDAP settings during the next login. This means, you cannot take away rights from the users, which are given by the AD/LDAP group membership or attribute.





# PSM Software Version 7.02 - 24th of July 2017

#### Enhancement: SNMP V3 write support

If you use PSM to also write back values such as printer name, contact, location back to the printers by PSM or if you are using the printer-reboot function from within the printer detail view, you can now use SNMP V3 instead of V2 to perform these operations. You can define the values globally from within the "Administration > Email setup and admin password" section, or you can define it for each printer in the printer detail view.

Please note: SNMP V3 write support has only been tested with HP printers yet.

Please note: SNMP V3 is not available on all editions of PSM, as it requires support by the OS. Older Linux based editions don't have the necessary support for it.

#### Enhancement: Backup location for PSM-Windows automatic backups

Until version 7.01 the backup location for the automatic backup files had to be inside the PSM directory. Beginning with version 7.02, you can now choose any local location on the server where PSM is installed.

#### Information: New builds available for Windows and Raspberry pi3

The latest builds available in the forum are now based on version 7.02. Also the new image files for the raspberry pi3 platform are based on 7.02. There is no need to update existing installations with newer builds. If PSM is already installed you can simply download the update package.

Please note: The reporting package introduced in version 7.00 is already included in the above mentioned builds.

# PSM Software Version 7.01 - 1th of July 2017

#### Bug Fix: "Call to undefined function snmp\_set\_oid\_output\_format" when adding printers

The first Ubuntu based PSM edition did issue the above error, when a printer is added manually or by class c range scan. This has been fixed.







# PSM Software Version 7.00 – 17th of April 2017

#### **Enhancement: Online reports**

The following enhancement only applies to the following PSM editions:

- Ubuntu 12.04 and later based VMWare/Citrix Images
- Ubuntu 12.04 and later based Rack appliances
- -Raspberry PI2/3 images
- Windows based PSM

Starting with Version 7, new online reports have been implemented. These types of reports allow more graphical based views and customizable data exports. Those types of report will be available to all PSM edition noted above, if there is a valid reporting license installed.

SysPrint AG State of the Art printing Printer Supply Monitor Dashboard Page counter and inventory lists History of monthly page count Device group overview Profile overview Top 10 - number of pages printed Top 10 - Few consumables left Top 10 - number of reported errors Share color / black & white LP227, 51 LP225, 51 LP224, 52 LP200, 52 LP200, 52 LP200, 52 LP200, 52 LP200, 52 LP200, 53 LP200, 51 LP200, 52 LP200, 53 224, 51 P200, 51 LP067, 52 LP063, 219 LP057, 50 LP059, 442,750 DVA altein 1 DAE LP136, 395,025 LP025, 308,859 LP226, 279,496 -LP234, 321,056 color31, 58 COLOR, 1,752,792 LP267, 270,326 LP265, 393,048 LP243, 267,722 10NO. 16.382.844 LP236, 514,484 PK7 Aktiv, 675 LP057
 LP200
 LP227
 color31 C LP063 LP224 PK4 aktiv C LP067 C LP225 LP233 LP234 LP232 LP232 LP232 LP205 LP006 LP084 LP002 LP002 LP002 C PK7 Akti COLOR CONO

Please note: The reports will NOT be installed just by upgrading the PSM version to version 7. The reports engine is available on a separate package, one for linux based PSM installation, and one for the windows based edition.

To install, you need to download the appropriate package and install it in the administrative section. If you're not sure whether or not your installation is windows- or linux based, psm will tell you which file to use (as indicated below).

Software Version 7.00 (SW-Code: W - OS-Code: W)	Online Reports Package Installation
Group Administration     Group Administration     Group Administration     Profile Administration     Program Administration and Scheduler     Manage Scheduler / Submit manual Queries     Maing use e	The online reports package is installed Choose Backup File (windows-psmreportpackage.zip)
Communication     Communi	Restore Back

Please note, that you should clear the browser cache before you try to upload the reports package, or else the upload might fail. If you can, you should call PSM using https.

Once installed, you can call the new reports in the "Logs and Reports" section:









# PSM Software Version 6.43 – 23rd of January 2017

#### Bug Fix: Duplicate error message for the same error

Under some circumstances, multiple error tickets were generated for the same error reason. This happened especially when 2 error profiles have been assigned to a printer. This has been eliminated (Version 6.41).

#### Bug Fix: Various problems when "use 30 column counter" was not activated in the scheduler

Beginning with version 6.24 the support to define up to 30 different counters in the counter profiles has been introduced. This Feature can be turned on in the Administration > Scheduler section. However, a problem has been found, which affects the following, if the feature has not been activated:

- Old Style group reports where not executed (only the main report was generated)
- Reporting Section: printers which have been added after version 6.24 has been installed, have empty counter tables (Totals of zero in the reports)

The above problem start to appear, if there were more than 15 counter specifications have been defined in one or more of the counter profiles in the Profiles > Counter profiles section. If this is the case, the program responsible to write the daily counters to the profile, tries to write 30 columns in printer counter tables, which only have 15 columns.

In order to avoid these kind of problems, the program, which writes the daily counters to the printer tables have been modified. All tables which have 15 columns will be extended to 30 columns. Please be aware, that this bug fix is not applied when you update to 6.42, but it will be applied automatically on the next daily schedule (midnight).

If you had "old style reports" active (the ones which can be enabled over the scheduler) you can also run the program /genMissingCounter.php one day after you have applied version 6.43. This update the tables with the values found on the monthly csv file, if it is still available.

#### Bug Fix: Restore between different editions did not work

The restore from older linux based hard- or software editions to the latest Ubuntu Linux based versions did not work. The reason is, that older linux based versions are encoded using the ZEND encoder, while later editions are encoded using the loncube encoder.

The restore program now checks the edition which was used in the backup file and compares it with the version it will be restored. Depending on the results, only the database and log files will be restored in order to avoid overwriting of program files with an invalid edition (using an encoding not valid on the target system).

Our recommendation is, to always have the source and the target system on the same software level, before making a backup on the old system and restore it to the new one.

If you have to restore from a backup file generated on an older software version (i.e. after a crash), please make sure, that you upgrade immediately to the latest version after the restore has been completed.

#### Program update: Table preparations for the upcoming Version 7

Behind the scenes new tables have been implemented. They will be used in the new online report section which will be introduced in version 7.







# PSM Software Version 6.39 - 26th of October 2016

#### Bug Fix: Auto creation of printer profiles for Ricoh based color devices sometimes incorrect

Some Ricoh devices have a non-standard order of the consumables in the public MIB. Usually Ricoh had the toner in the first 4 columns, followed by the waste toner box. Some devices have the black toner, the waste toner box and then the 3 color toners. In this situation PSM assumed the wrong MIB, and therefore the waste toner box did not work.

We have changed the auto-creation program, so it will now no longer assume, but check the MIB explicitly to verify the correct MIB.

#### Bug Fix: Multiple emails alerts when triggered over error profile 2

Due to a mistake in the program, the error alerts for error profile 2 was executed multiple times instead of only one time. This has resulted in sending the same alert up to 3 times. The program has been corrected to avoid this.

#### Bug Fix: PSM did not work anymore after upgrading to version 6.33 (only very old variants < 2011)

In Version 6.33 "snmp\_set\_oid\_output\_format(SNMP\_OID\_OUTPUT\_NUMERIC)" was implemented in order to force the retrieval of specific values in numeric format. However, on the first editions of PSM (PSM Lite Box and Ubuntu based PSM) this command is not supported by the OS. This has caused all programs using SNMP to fail on those versions.

(To recognize if you are affected: These are basically all PSM variants which used "Webmin" to setup the network Parameters). This is the case on PSM editions before the year 2011. However, we did not receive any problem reports yet, but we stumbled over this issue during a test.

We have implemented a check to verify if the command is supported or not in order to avoid failing of the program.







# PSM Software Version 6.38 - 19th of September 2016

#### Enhancement: Ricoh @remote email format support

The special email format used by the Ricoh @remote system has been implemented in PSM. You will find a new entry in the "Profile Administration" section called "Email profiles". As any other profile, these profiles can be edited, imported and exported (Except for the built in default PSM email profile).

Email profiles				
Create new Profile Delete selected	Export se	lected	Back	
Email profiles		change/view	Delete Profile	Export profile
Default				

On both, "Tag Name" and "Tag Data" you can use plain text or choose from the available variables described on the right side. Up to 20 lines can be defined. "Tag Name" and "Tag Data" will be separated by a blank character.

Profile Name			Possible variables	Variable description
@remote s	tandard		%PSMLicCustNbr	License information: Customer number
ag order	Tag Name	Tag Date	%PSMLicCustContact	License information: Customer contact person
1	1.Customer Name / ID:	%PSMLicCustNbr	%PSMLicEmail	License information: Customer email address
			%PSMLicCompany	License information: Customer company name
2	2.Supply Administrator Name:	%PSMLicCustContact	%PSMLicStreet	License information: Customer street address
3	3.Supply Administrator Email Address:	%PSMLicEmail	%PSMLicZipCity	License information: Customer ZIP code and city
4	4.Customer address:	%PSMLicCompany, %PSMLicStreet, %PSMLicZipCity, %PSMLicCountry	%PSMLicCountry	License information: Customer country
5	5.Customer phone number:	%PSMLicPhone	%PSMLicPhone	License information: Customer phone number
-	1		%PSMOrderNumber	PSM Order number
6	6.Model name:	%PSMOrderPrtModel	%PSMOrderDateDDMMYYYY	PSM Order date (format dd/mm/yyyy)
7	7.TAG ID:		%PSMOrderDateMMDDYYYY	PSM Order date (format mm/dd/yyyy)
8	8.End Supply Type:	Supply Call: %PSMOrderPartDescription	%PSMOrderDateYYYYMMDD	PSM Order date (format yyyy/mm/dd)
			%PSMOrderTime	PSM Order time (format hh:mm:ss)
9	9.Toner Status:	%PSMSupplyAlRemaining	%PSMOrderPrtIP	Printer ip address
10	10.Meter (Color/Black):	%PSMOrderPrtCountersCM	%PSMOrderPrtName	Printer name
11	11.Receive date and time:	%PSMOrderDateMMDDYYYY %PSMOrderTime(MM/dd/yyyy HH.mm:ss)	%PSMOrderPrtContact	Printer contact person
12	12 Device S/N	SiPSMOrderPrtSN	%PSMOrderPrtLocation	Printer location
	1		%PSMOrderPrtAsset	Printer asset number
13	13.Latest 10 Supply Call History:	%PSMOrderPrtHistoryPart	%PSMOrderPrtGroup1	Printer group1 assignment
14	14.Service Depot Name:	My_Service_Delivery_Depst	%PSMOrderPrtGroup2	Printer group2 assignment
15	15 Supply Administrator Phone:	%PSMLicPhone	%PSMOrderPrtSupplierGroup	Printer supplier group assignment
16	16.Note 2:		%PSMOrderPrtModel	Printer model
	16.Note 2.		%PSMOrderPrtSN	Printer serial number
17			%PSMOrderPrtCountersCM	Printer counters (Color/Monochrome)
18			%PSMOrderPartNumber	Part number of part beeing ordered
19			%PSMOrderPartDescription	Description of part beeing ordered
	1		%PSMSupplyCurrentRemaining	Supply level remaining of the part beeing ordered
20	1		%PSMSupplyAIRemaining	Supply level remaining (all parts)
			%PSMOrderPrtHistoryPart	Order history of part beeing ordered
	Save Back		%PSMOrderPrtHistoryAll	Order history of all parts for the current printer
			%PSMEmptyLine	-

To use this profile, you will need to assign it to one or more of the defined supplier groups.

Manage Consumable Su	anage Consumable Suppliers											
Back	Back											
You can specify the Names and En Administration.	nail Addresses of several Suppliers, who should get your On	ders. The Suppliers specified here ca	an be assigned individual	1								
Supplier Name	Email Subject for Orders	Email Recipient(s) for Orders	Email Format	/	XML profiles for the attachment to email orders	CSV profiles for the attachment to email orders	Email Recipient(s) for Statistics					
			Default	×	~	×		Add				
@remote Test	@Remote Supply Call (Supply Type: Supply Call: %PSMOrderPa	steve@sysprint.ch	@remote standard	~	×	×		Change	Delete			

Example email generated with this profile and email subject:



Please note, that you need to set "only orders for one printer for each email" will need to be set in the program scheduler. Also, PSM will generate an email for each consumable part, if more than one part has to be ordered for the same printer.







# PSM Software Version 6.37 – 6th of September 2016

#### **Bug Fix: Daily Testmail Attachment (Windows Version only)**

If "send daily testmail" is activated in the scheduler, PSM for Windows did not send the zip attachment with the current printer status. This has been fixed.

#### **Bug Fix: Number of Characters allowed for Group Names**

Within the group1, group2, toner service group and consumable supplier group you could define up to 150 characters. The corresponding entry in all of the printer tables were limited to 50 characters only, which broke the connection between the group and the printer tables.

This has been changed: The printer tables now also allow 150 characters for the group names.

## PSM Software Version 6.36 – 10th of August 2016

#### New:

Added Support for the Rack Appliance based upon UBUNTU 14.04, which is the same as the VMWare based Ubuntu 14.04 Version.

#### Enhancement

The language selection on the login screen can be disabled in the Program Administration > Admin Password and Email Section. The reason to make this selectable was complains, that when the admin changes the language at login, also the language for some of the system messages are changed.

#### **Bug Fix: Printer error triggering**

As a feature in the profile, you can select to wait for a certain amount of error occurrence's or for a certain amount of error occurrence's within a specified amount of errors. (Default is, to report errors right when they are detected).

While the default was still working, the other two possibilities did not. PSM did not send an alert. This has been fixed.







# PSM Software Version 6.35 – 7th of June 2016

#### Change: Email CSV Attachments / CSV Reports

Some programs have not properly detected the "new line" sequence used in the CSV attachments. The line feed for the CSV attachments have been changed from Hex "0A" to Hex "0D 0A".

When some of the fields, such as "contact" and "location" contained the CSV delimiter character (usually ";" or ","), the CSV files did not open correctly. The CSV generator has been changed to remove any occurrence of the delimiter character before generating the CSV files.

Enhancement: New Report Type 6 (System messages)

Report type 6 has been added, to allow automatic reporting of system messages. This may be reports of when printers have been added, deleted, or moved to the stock, or other messages such as mail related messages. You can use the "Error message filter" to limit the results. Please note, that report type does only allow filters for specific messages or devices. All other filters available in other reports will not be available in this type of report.

## PSM Software Version 6.34 – 1st of June 2016

#### Bug Fix: PSM Windows - update not possible

If you are experiencing problems with the update, please load the following patch over "Backup / Restore > Restore". As soon as you restored this patch, you can directly do the update. Link to the Patch: http://partner.sysprint.ch/files/PSM\_Downloads/Updates/PATCH-6.34-psmbackup.zip

#### Bug Fix: PSM Windows GUI wrong characterset (German and French only)

The GUI on the PSM windows version displays wrong characters when set to German or French. This happens only with Firefox, Chrome and Edge. A check has been implemented to detect those browsers and convert the html code to UTF8.

#### Bug Fix: "DontSend" to suppress email sending did not work for Toner Service- and Error Messages

While the suppression of Orders worked perfect, when "DontSend" was specified as email recipient, it did not work for Toner Service Alerts and Error Messages. The mail was gueued and retried. This has been corrected.

#### **Bug Fix: AUTO xxx Counter Profiles did not work**

Affected PSM Variants:

- Latest PSM for Windows build
- Raspberry PI2 build
- Ubuntu 14.04 based virtual machine images (VMWare & Citrix)

Due to a new default value in php.ini for the retrieval of SNMP MIBS the MIBS returned when the AUTO\_XEROX, AUTO SHARP and AUTO RICOH profiles are used is Enterprise.x.x.x.x instead of numeric .1.3.6..... This prevented the correct MIB to be returned to PSM, and the counter profiles returned empty values. This has been fixed. All PSM programs requiring the numeric MIB value will force the correct settings now.

#### Change: Email order sending when more than one recipient is specified

Instead of sending a single email request to all recipients, PSM will now send an email to every recipient separately. The reason for that is, that if one single recipient failed and the mail server sends a negative feedback, PSM has assumed that there was something gone wrong, queues the mail and resent it. This caused the email to be sent more than once to the recipients which previously already worked.





Also some email servers can be configured not to return an error message if for example a single recipient failed, but suppressed sending of the other recipients as well. As a result, nobody received the order. This change will allow PSM to handle each recipient separately.

#### Enhancement: CSV attachments to order emails

While xml attachments to order emails have been introduced in version 6.24, the system has been further enhanced. It is now also possible to attach a csv file to an order.

Requirements for this feature to work:

- The support for 30 columns has to be turned on in the scheduler (manage scheduled tasks)
- "only orders for one printer for each email" has to be turned on in the scheduler
- Profiles can be defined in the "profile administration" > "CSV Profiles...".

You can turn on up to 54 fields and select in which order they should be written to the CSV file. The fields consist of the customer number (as defined in the license administration), order specific fields, device specific fields and the page counters.

To use a profile, you will have to assign it to one or more "Supplier Groups". The printers with that supplier groups assigned will generate the attachment, once an order is due. Please note, that if there are more than one part due to order, the CSV file will contain each part on a separate line.

#### Enhancement: Totals now displayed on printer detail view

If you have defined formulas for the total page counters, they will now also be displayed on the printer detail view. Also, if you have setup the scheduler (email orders) for "only orders for one printer for each email", the totals will be contained in the order email.

# PSM Software Version 6.32 - 11th of April 2016

Note: Version 6.32 is also the base version used for the following server builds:

- VMWare image, based on Ubuntu 14.04 LTS
- XenServer image, based on Ubuntu 14.04 LTS
- Latest Windows Installer Packages

All of the above can be found on <u>http://www.printertools.ch/psm/Sysprint</u> or in the support forum <u>http://partner.sysprint.ch/n\_forum</u>.

#### Bug Fix: Import / Export of profiles with the character "+" inside the name

If the profile name (regardless of the profile type) had a "+" (plus) character in the name, the export and import was not working. This was due to the URL encoding, where the + character has a special meaning and was interpreted as an escape character rather than a valid character. This has been fixed.

#### Bug Fix: Ricoh based printers based printers did not order all parts

For Ricoh devices which has supply parts which are only capable of reporting "OK", "LOW" and "EMPTY" the order was not correctly executed. This has been fixed. Also the "part has been replaced" message will now be logged for those devices.







# PSM Software Version 6.31 – 7th of March 2016

Note: The Releases 6.28 - 6.30 are internal development releases only. All development releases from 6.28 - 6.30 have been integrated in the official 6.31 Versions.

#### Enhancement: Login GUI language selection

The GUI language can be changed on the login screen. If a specific language is selected, this will become the default language for the user who logs on.

#### Enhancement: Reboot no longer needed when updating

On newer PSM variants, a reboot is no longer needed when you do an update. The PSM scheduler service will be restarted automatically. The system detects on which OS version it is running. On older versions, a reboot will still be needed (if so, you will be prompted to do a reboot).

#### Change / Update: Email

The mail program has been updated to allow TLS protocol with newer mailservers.

#### Change / Update: Networking

Affected: Only Linux based Variants, both, hardware and VMWare image based.

The network configuration section has been modified to work on the upcoming VMWare based image (Ubuntu 14.04 based) and the hardware based raspberry pi2 models.

Additionally, the domain name field allows to specify more than one domain, separated by comma. The first domain name specified is the one PSM is using as the domain name where it is located. The first and subsequent domains specified are used as "search domain". This is useful if PSM needs to resolve host names in more than one domain.

#### Change / Update / Enhancement: New PSM variants

The PSM internal programs have been modified to correctly recognize on which variant it is installed, and to handle it correctly. Support for the 2 new variants have been added:

- Raspberry PI2 (Raspian OS based)
- upcomming new VMWare Image (Ubuntu 14.04 based).

Both of the above variants are no longer using the ZEND encryption, but the IONCUBE encryption. This means, that update packages will be .zip packages for the 2 new variants (same as for the Windows Version). Backup / Restore packages will still be .tar files.

#### **Bug-Fix: Manual execution of reports**

Some of the defined reports refused to be executed manually from the report overview. This has been corrected.

#### Bug-Fix: Manual orders did still not work in some situations





When initiated from the printer detail view, the order status correctly changed from "N" to "M" (manual). However, in some situation the automatic printer query has overwritten the status from "M" back to "N", so the part was not ordered on the next order schedule time. This has been corrected.

# PSM Software Version 6.27 - 4th of January 2016

#### Enhancement: Daily status mail

The daily status mail now also contains an packed xml attachment containing the status information for each printer. The xml can be used to feed a database. Please note that the daily status mail is disabled by default. If you wish to receive it, you will need to enable it over the scheduler, and enter a valid email address for the status mail to be sent to.

#### Information:

We are currently working on other product enhancements as well. You will not see the enhancements until they are finished, but you will see that the update package size has increased. So there is no need to be alarmed.

During the update you may receive warning messages. This is normal and the warnings can be ignored.







# PSM Software Version 6.26 - 22nd of November 2015

#### **Enhancement: Manual alert for Toner Service alert**

Using the toner service alert feature, you can now also trigger a manual alert and set a reason for it.

Part Number	Consumable Description	Threshold Value (%) (Tonerservice)	Part below Threshold? (Tonerservice)	Warning Date	Remaining Capacity	Remaining Connacity ( % )	Maximum Capacity	Manual alert / reason	
CE260A	Black Cartridge HP CE260A	5	N		61	61 %	100		1
CE261A	Cyan Cartridge HP CE261A	5	N		54	54 %	100	causes cyan stripes	1
CE263A	Magenta Cartridge HP CE263A	5	N		51	51 %	100		1

This will allow you to alert your service team to replace a consumable part not only because it is almost empty, but also because it causes a failure. Your service team will receive the alert immediately and will also see the reason you entered in the text box.

#### Enhancement: Error routine profiles and printer profiles import / export improved

In version 6.24 we first introduced the enhanced import/export of counter profiles. This has been implemented for error routine profiles and printer profiles as well. The new profiles will be exported as .xml files. You can the profile to be exported, they will be stored in one single xml file. These "profile packs" can be re-imported to another unit and you can choose to overwrite existing profiles.

Additionally you can delete unused profiles in one single step: Mark all profiles and click on the "delete" button. This will delete any profile not assigned to one or more printers (so you cannot accidentally delete a used profile). NB: old (non-xml) profiles can still be imported.

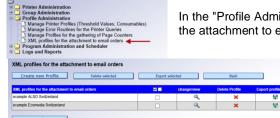
#### **Enhancement: XML Attachment to email orders**

It is now possible to have a XML file attached to the orders sent by email. Please note, that this is only supported, if you have selected "only one order per printer" in the scheduler.

#### This is how it works:

#### Define xml profiles

Since every system expects different structures and Tags in the XML files, we have made this as flexible as possible.



In the "Profile Administration" section, you will find a new entry called "XML profiles fpr the attachment to email orders".

> The options within the profile selection are the same ones as already present for the printer/error/counter profiles. This means you can modify, import, export and delete profiles. So let's start to create a new profile.

To create a new profile you will need to know the structure of the xml you want to create. The most easy approach (if you don't have the specifications for the xml file) is to take an existing xml file from the system you plan to send xml orders to.

We also recommend to use an example for an existing order, where more than one part is ordered, to find out where the variable section is located in the xml profile.





# Original XML file example

#### Resulting profile example

Once you have finished the profile, you can define variables to be used. They will be replaced with actual Data when the xml is created during an order process. Please note, that you need to define which of the tags should contain the variable data (the block which is repeated for each consumable part ordered). Please note, that a Tag called "ENDXML" will be added automatically as last entry by the system. This is needed and should not be removed.

String	replaced by (example)	Explanation	XML tag name
			< order
Strings available in all pa	rts of the XML definitions, excep	ot the variable part for the consumable	
\$OwnerCompany	Example Comany Ldt.	Taken from License Manager	< order_twader
\$OwnerCompany2	Information Technology	Taken from License Manager	< order_party
\$OwnerName	Server Support Team	Taken from License Manager	
\$OwnerStreet	Highway to hell 666	Taken from License Manager	< order_information
\$OwnerPlzOrt	99999 City of dreams	Taken from License Manager	< order_body
\$OwnerCountry	Connada	Taken from License Manager	
\$OwnerPhone	0088 888 123456	Taken from License Manager	* line_item_number
\$OwnerEmail	support@example.com	Taken from License Manager	< ENDXML
\$OwnerCustomerNumber	9982247	Taken from License Manager	□ —`
\$xmlTitle	Consumable Order	According to subject set in supplier group	-

XML tag name	Tag order	priority inside tag order	XML tags and data inside the selected tag name
< order >	0	0	Creasage_basise convert.Off destination*19" eccessorie*"passeonif test_tag="0" nessage_bper*order' doc pression_date*" <mark>SonEdebOTEU</mark> " pression_time*"SonFine(")>
< order_header >	1	1	Conder, reference)     de control de la
<order_party></order_party>	1	2	90yw_2wty= 90wt_200 -(12NA960054(12NA)- 4(3M1/_200
order_information >	1	3	redistional_information> <0CDDN-PEM automatic Onder <0CEEP->CCEEP> <0CEEP->CEOH>
order_body >	2	1	
< line_itom_number >	2	2	GLIPbilaniPistics GLIN+ goat number culture-scitture statilus-bandParticipae-Mattilu>
	9	1	The ENCIVAL tag is automatically added by the program and cannot be removed. It signals the end of the and file and
	9	9	
~>		9	
Variable tros			
Consumable tag	Ste item number	X	If there is more than one order position, the data inside the consumable tag needs to be repeated.

Strings available in all parts of the XML definitions

\$xmlOrderNumber	123456	generated by the system
\$xmlDateUS	20151120	US date format without delimiters
\$xmDateDOTUS	2015.11.20	US date format with dots
\$xmlDateSlashUS	2015/11/20	US date format with slashes
\$xmlDateHyphenUS	2015-11-20	US date format with hyphens
\$xmlDateEU	20112015	EU date format without delimiters
\$xmlDateDOTEU	20.11.2015	EU date format with dots
\$xmlDateSlashEU	20/11/2015	EU date format with slashes
\$xmlDateHyphenEU	20-11-2015	EU date format with hyphens
\$xmlTime	13:02	Time (hour:minute)
\$xmlDeviceName	chzhprt01	The printer name, if configured
\$xmIDeviceAddress	192.168.99.251	Host name or IP address of the device
\$xmlDeviceModel	HP LaserJet 500 color MFP M575	Device model
\$xmlDeviceCounter	54211	Page counter at the time of order
\$xmlDeviceSerialNumber	XFTSG2R50B	Serial number of the device
\$xmlDeviceLocation	Company, Department, Street, Zip, City	Device location, if configured
		If line breaks are present in the location field, each line can be extracted (starting
\$xmlDeviceLocationArray[x]	Splited Array of the above	with number 1)
\$xmlDeviceContact	Mr Wong	Device contact, if configured
\$xmlDeviceGroup1	Printers Zurich	Group1 assignment, if configured
\$xmlDeviceGroup2	Color Devices	Group2 assignment, if configured
\$xmlDeviceSupplier	My Delivery Suplier	Assigned supplier group
\$xmlDeviceAssetNumber	1945986	Device asset number, if configured

#### Strings available in the variable consumable part of the XML only

\$xmlPosNr	1	Ascending, starting with 1
\$xmlPartNumber	CA1004X	Part number needed
\$xmlPartDescription	Toner Snow-white	Description of the part number needed
\$xmIThreshold	20%	Currently set threshold
\$xmlRemainingCapacity	19	Remaining capacity of the part

# SysPrint AG State of the Art printing



After you saved the profile, you can test it by clicking on the TEST bottom of the page. This will generate an xml file with dummy replacement data. The file can be opened in the browser or downloaded to be verified in your application.

Once you finished your xml profile, you can attach it to the supplier group. All orders for printers, which are assigned to that supplier group, will contain the xml attachment when ordering.

Supplier Name	Email Subject for Orders	Email Recipient(s) for Orders	XML profiles for the attachment to email orders	Email Recipient(s) for Statistics		
			×		Add	
1st nation	Consumable order with xml	steve@sysprint.ch	example Ecomedia Switzerland 🗸		Change	Delete

Please be sure, that the "only orders for one printer for each email" checkbox is checked. XML attachments are supported in this mode only.

Manage Scheduled Tasks 🤤				
Description	Value			
Query Interval in Minutes	15		Last run: 21-11-2015 17:20	Values between 5 Minutes and 300 Minutes (5 Hours) are possible.
Minimal Network Traffic				Minimal Network Traffic means: Only one SNMP Session every 100 Milliseconds, and Page Counters only queried twice a Day
Network timeout in milliseconds for minimal network traffic	20	(20-5000) ms		
SNMP Timeout in milliseconds	1500	(500-10000) ms		
Number of retries for the SNMP communication	1	(0-9)		
Number of simultaneous processes (1 - 8)	1			If higher than 1, PSM will devide the number of printers by the number of Processes and will query them in separate processes. NOTE: This only works if you have 200 or more printers, and only for automatic background processes!
1th Order sent at: (eg. 14:00) Interval of Email sendino in Hours	14:20 24		Last run:	Start Time and Interval of captured Orders. The starting Time can be setup individually, the Interval can be set from 5 Minutes to 300 Minutes (5 Hours).
Only Orders for one Printer for each Email	<u>∠</u>		21-11-2015 14:20	If you choose this Option, PSM will generate one Email for each Printer where there is something to order. If unchecked PSM will concatenate all Orders into a single Email (default).

#### Bug Fix: Part number and part description boxes outside displayable area

Using IE10 and above, the "on mouse over" text boxes in the consumable status view where displayed outside the displayable area. This was because of the compatibility view in IE10 and above. We have redesigned the table, in order to no longer require the compatibility view in IE to be set on. Users who have added the URL to the compatibility view list in Microsoft IE: Please remove the URL from the list. Otherwise the display will be wrong after you updated to version 5.26 and above. The text box will now be displayed left of the mouse pointer in IE, Chrome and Firefox.

IP Address / Host Name	Printer Name	Remarks	Printer Model	Page Counter	Last succesful Query	Å.		<u>ش</u>	لها			
192.168.200.52	PRT052		CE260A		-	01%	54%	51%	68%	1%	0%	
152.100.200.52	PR1052		hp color lase Black Cartridg	e HP CE2	60A 🔸	01%	34%	51%	06%			
		[										

# PSM Software Version 6.25 – 25th of October 2015

#### Bug Fix: Parallel processing (more than 1 process) did not work correctly (Windows Version only)

If you have defined more than one process in the scheduler, PSM should split the number of devices within a printer query by the number of process. The split was made correctly, however the scheduler call missed the parameters for "from device - to device". Therefore all processes gueried all devices. This resulted in higher load and more network traffic. It also resulted in toner service alerts sent twice. This bug only affected the windows version of PSM, and only if more than one process was defined in the scheduler.

#### Bug Fix: HP designjet printers did not update ink levels

One of the safety mechanisms of PSM is to check for a valid engine counter. If the engine counter cannot be queried, PSM assumes, that the device is currently in an invalid state and does not do the update. Since designjets do not have an engine counter, the ink status was not updated. This has been corrected. If the device model name contains "designjet", the safety mechanism is switched off, allowing designjets to update the ink levels correctly.







# PSM Software Version 6.24 – 18th of September 2015

#### Enhancement: Workaround for multiple wrong orders now also implemented for toner alerts

The enhancement introduced in Version 6.23 is now working for toner service alerts, too. This means, that you can chose psm to alert only, if an alert condition has been detected more than once for specific consumable parts. For a detailed description please check the notes for Version 6.23.

#### Enhancement: Log messages improved for automatic and manual imports

The log for the automatic import now also contains the ip address / host name and not only the import file column for printers which cannot be imported, because they are offline.

#### Change: SNMP Timeout increased by default any can now be set manually

The SNMP timeout basically affects two areas:

The printer queries: If the timeout is too low and when the device enters sleep mode it can happen that the printer response is too slow, resulting in printers not queried. We've seen this especially on small device which are most of the time in sleep mode.

When adding new printers using manual import or automatic import, the situation is the same: if the printer responds too slow, it will be omitted during the import.

You can set the timeout over the "Program administration and scheduler" > "Manage scheduler / submit manual queries".

The default timeout is now set to 1500ms (was hardcoded to 900ms before), and the retries to 1. This means that we wait 1.5 seconds for a response from the printer and retry it once. This will make a total of 3 seconds. Please be aware that if the timeout is set too high and you have many printers which are powered off, this will increase the time used for the printer queries too.

So for example if you have 400 printers, and half of them are offline, it would 200\*3 seconds (10 Minutes) just for the offline printers to be gueried, and an assumed 3 minutes for the devices which are online. In the following example, this would just be enough to complete a full query within 13 minutes. Since the query interval is set to 15 minutes, this would work. You should consider to set the number of simultaneous processes to a higher number, if you see a lot of running tasks at the same time.

Manage Scheduled Tasks 🖗			
Description	Value		
Query Interval in Minutes	15	Last run: 09-09-2015 12:35	Values between 5 Minutes and 300 Minutes (5 Hours) are possible.
Minimal Network Traffic			Minimal Network Traffic means: Only one SNMP Session every 100 Milliseconds, and Page Counters only queried twice a Day
Network timeout in milliseconds for minimal network traffic	20 (20-5000) m s		
SNMP Timeout in milliseconds	1500 (500-10000) ms 1 (0-9)		
Number of simultaneous processes (1 - 8)	1		If higher than 1, PSM will devide the number of printers by the number of Processes and will query them in separate processes. NOTE: This only works if you have 200 or more printers, and only for automatic background processes!
1th Order sent at: (eg. 14:00) Interval of Ernail sending in Hours Only Orders for one Printer for each Ernail	13:30 24	Last run: 08-09-2015 13:30	Start Time and Internal of captured Orders. The starting Time can be setup individually, the Internal can be set from 5 Minutes to 300 Minutes (5 Hours). If you choose this Option, PSM will generate one Ermail for each Printer where there is something to order. If unchecked PSM will concentente all Orders into a single Ermail (default).
Treat LOW toner status as xx %	10 % (1-30)		This affect the consumable status view sorting order only.
Daily status email Email addresses for the daily status email			If activated, an Email will be sent to inform you about the Status of the System. This Mail will be sent at the same time selected for Orders.
Total Reports at 1th of each month	V	Last run: 01-09-2015 00:30	Monthly Email containing 3 Files: 1 Summary Report in csv Format, 1 html File with the Total Consumables ordered, and 1 html File with detailed Informations about each Printer. These reports are cumulative
Separate Report for all Group1 Groups		Last run:	Same as above, but one Email for each Group Name within Group1 will be sent. This only works for those Groups with defined Email Adresses for Statistic.
Separate Report for all Group2 Groups		Last run:	Same as above, but one Email for each Group Name within Group2 will be sent. This only works for those Groups with defined Email Adresses for Statistic.
Separate Report for all Supplier Groups		Last run:	Same as above, but one Email for each Supplier Group will be sent. This only works for those Groups with defined Email Adresses for Statistic.
Use 30 Counter Columns			This is for support / transition reasons only. Please do not change.



# SysPrint AG State of the Art printing



#### Change: Counter profiles updated to 30 columns / handling change

Since many years PSM counter profiles can be configured to query up to 15 counters. Since newer multifunction device models have more counters, we received more and more requests to allow for more than 15 counters. Service providers which often maintain more than just one installation / site also asked for a simplification of the profile handling.

It did use a lot of time to perform the necessary changes to the programs and database, but finally it is done. The main overview of the counter profile has changed. While you still can change, delete and export a single profile by clicking on the icons (in the area marked yellow in the screenshot below), you can also delete or export multiple profiles at once. On a multi-delete, PSM of course will only delete the profiles not in use by any printer.

You can now mark all profile and choose to export them to a single file. The format of the exported file is XML.

Overview of existing Counter Profiles									
Delete selected Export selected	Back	k							
Counter Profile Name		change/view	Delete Profile	Export profile	Import a Counter Profile / Copy an existing Profile				
Alicio SP C242SF		Q.	×	8					
AUTO_RICOH		Q	×	18 N	Choose Profile to import (*.xml) (PSM Version >=6.24)		Durchsuchen	Overwrite profiles ?	Import now
AUTO_SHARP		a,	×	10 N	Choose Profile to import (*.counter) (PSM Version <6.24)		Durchsuchen		Import now
AUTO_XEROX		Q	×	<b>M</b>	Copy existing Profile	~			Copy profile
Canon ir ADV Series		Q	×	8	Copy example round	-			Copy prove
Canon ir ADV Series-02		Q	×	88	Beck				
Hewlett-Packard		٩	×	88					
Hewlet-Packard-02		٩	×	88					

Important to know:

- One single XML file can hold one or many profiles
- The XML files can be imported to another PSM, if at least Version 6.24 is installed. During the import you can . choose to overwrite existing profiles.
- The old (.counter) profiles can still be imported, but they only contain the first 15 counters.
- The update to Version 6.24 will not affect the currently installed profiles. You can add more columns after the update.
- If you want to extend existing profiles, you should keep in mind, that the database table assigned to every printer holds your past counter data. You should NOT move around existing columns, just because it looks nice. Doing so, would result in counter data in position 3 (for example) was A4, and after you change position 3 to letter, the counters in the table would be letter from the day you change it. This would lead to wrong results, if you do a report starting on a date, where position was A4 and ending on a date where it is Letter. Therefore we recommend to leave the 1st 15 columns intact, and add other wanted counters in the positions 16-24.
- Service providers using the "old style" monthly csv counter file should contact us before the upgrade, so we can define an action plan for the change (we have made a special modification for you to make the update easy and planable). This update will not change the monthly automatic csv report. It will remain 15 columns, until you change it over the scheduler.

Use 30 Counter Columns This is for support/transition reasons only. Please do not change.

#### **Bug-Fix: Database cleaning**

As already described in Version 6.23 we have noticed, that the following HP parts give problems, and should be excluded from automatic ordering. The affected part numbers are: C8091A, CC383A, CE980A and CE254A. These are mainly Staples. They may have created a huge number of "part has been replaced" messages in the PSM log, making PSM slower and slower. During the import, these messages will be deleted from the log, and the log table will be optimized. This may take a minute or two. Please be patient and allow enough time for the update.

#### **Bug-Fix: Manual orders not executed in all cases**

When manually ordering a consumable part, this was not executed, when the remaining capacity of the consumable part was 50% or above. The double order protection inside the printer query program prevented the order. Manual orders will now set the consumable warning status to "M" instead of "Y". This allows to see that it is a manual order, and also tells the printer query program not to interfere with this order.







# PSM Software Version 6.23 – 24th of August 2015

#### Enhancement: Workaround for multiple wrong orders

PSM has a number of mechanism to prevent multiple toner orders from being triggered for the same consumable part. Still - there have been situations where orders were executed by mistake. We've experienced that with some - especially color Futuresmart based HP devices and some of the Pro series too. Tracing the machines showed that it sometimes happens, that the device shows 0 remaining capacity for one or all toners during a query without any reason. When queries 5 minutes later, the remaining capacities are back to their real level. This can trigger a wrong order in PSM. As an additional mechanism to prevent this from happening, we've added an additional column inside the printer profiles.

It is called "number of successively carried out queries".

The default is 1, meaning that PSM acts like before: If a remaining capacity has been detected during a query, it will mark the part as "to be ordered".

If you put a higher value (lets use 3 in this example, which is the one we would recommend in case of problems), PSM needs a remaining capacity level below the threshold 3 times in a row, before it marks the part "to be ordered". This will prevent the suddenly wrong occurring "0 remaining capacity" to trigger an order, if it happens just once or twice.

Below there is an example:

Consumable Configuration : HP LaserJet 500 color MFP M575 0 Threshold Levels for Orders: If you Enter a value of Zero, the affected Part will be excludes from the Ordering Process. Threshold Levels for Tomer Service: If you you leave the Field Emply or Enter a 0, the affected Part will be excluded from the Notification. Printer Profile last checked at 06-08-2015												
Part Num ber		Consumable Description	Threshold Value (%) (for Orders)	num ber of S carried out q		Threshold Value (%) (Tonerservice)	Maxim um Capacity	Printer MIB to retrieve the remaining Pages				
CE400A		Paltone Schwarz 507A HP CE400A	20	3	]	5	100	.1.3.6.1.2.1.43.11.1.1.9.1.1				
CE401A		Palrone Cyan 507A HP CE401A	20	3	]	5	100	.1.3.6.1.2.1.43.11.1.1.9.12				
CE403A		Patrone Magenta 507A HP CE403A	20	3	]	5	100	.1.3.6.1.2.1.43.11.1.1.9.1.3				
CE402A		Patrone Gelb 507A HP CE402A	20	3	]	5	100	.1.3.6.1.2.1.43.11.1.1.9.1.4				
CE506A		FixiererkitHP 110V-CE484A, 220V-CE506A	20	1	]	5	100	.1.3.6.1.2.1.43.11.1.1.9.1.5				
CE254A		Toner Collection Unit	20	1	]	0	100	ERROR%.1.3.6.1.2.1.43.18.1.1.8.1% order loner collection unit				

#### Bug Fix: Email order sending did not include all printers in the database

When you had LAGER\_/STOCK\_ printers in the database, there were calculated in the total active printers by mistake. If the license was smaller than the total active printer PLUS the "Stock" printers, it could have happened, that some of the active printers did not execute an order. This has been corrected. Only the active printers are calculated in the email order program.

#### Bug Fix: German and French character set did not work properly

This bug was introduced in version 6.21, when we changed our master programming workstation to Windows 10. The file encoding of the files edited by our program editor changed the encoding when we saved those files. This has resulted in some of the web pages not displayed correctly, and the email titles and file names to become incorrect. You did experience this error only when the GUI was set to german or french. English was not affected.

#### Bug Fix: Reverse calculation (for OKI printers) did not work

OKI printers report some of the consumable parts (belt / fuser) in reverse. This means, that their MIB for the remaining capacity is not the remaining capacity. In fact it tells how much have already been. For this we have introduced the trigger "R" in front of the MIB. This tells PSM to use the "OKI logic", and consider the value received from the printer as "already used capacity" instead of "remaining capacity". This feature is present in PSM since many years. However it did not work since guite a while. We have fixed this to get this feature working again.







# PSM Software Version 6.21 – 5ft of August 2015

#### Enhancement: Printer offline check possible for more than 24 hours

Up till now you were able to set an error profile so you were able to check, when the profile matches a certain condition to keep that in memory and only report it if it happened x times in up to 24 hours. Since there are many companies who would like to be alerted, if a printer is offline (not reachable) for a longer period of time, we have changed that behavior. You can now specify up to 672 Hours (= 4 weeks) before an alert will be sent.

However, you have to keep in mind, that the logic behind that is still the PSM queries. To calculate this, you have to know, that PSM only execute gueries between 01:35 and 23:00. And the number of gueries per day is dependent on that fact, as well as it is dependent on the query interval you have set in the scheduler.

	SNMP OID		Value
Name of Routine	Hewlett-Packard-02		
If SNMP OID	1.3.6.1.2.1.25.3.2.1.5.1	.has the value	down
AND			
If SNMP OID		.has the value.	
or if SNMP CID		.has the value	
then Read the Error Messages out of the MIB-Tree:	136.1.2.1.43.18.1.1.8.1		
BUT only, if the Errormessage contains the Words:	<b>\$</b>		You can specify Words or sentences, separated by % (Percent). Example: Jam%Tray%no Paper%Warming%
and DOES NOT contain the Words:	~		You can specify Words or sentences, separated by % (Percent), Example: Jam%Tay%no Paper%Naming%
Report Powered of or unreachable Printers?			If selected, Powered off Printers will be reported. This Setting is only recommended for Printers who should be online all the Time.
Minimum Number of Errors before a Notification is sent	258		Enter 0 (zero) if you want to be notified immediately
Hours before an Error Message is sent	72		Enter 0 (pero) if you want to be notified immediately. If you Enter a non- Zero Value, you must also Enter a Namber higher than 1 for the Minimur Namber of Enterol Example: If you Enter 10 for the Minimum Namber of Enrossand 24 for th Hours, before an Enror is Sent, the Notification will be sent if there are 10 an ranse Enrow within the last 24 Hours.

Example: Query Intervals are set to 15 Minutes. This means, that the number of queries executed in one full day is the amount of times a query is done between 01:35 and 23:00. In this example 86 queries will be done in one day.

So if you would like to be alerted, when a printer is not reachable for exactly 3 days, you will have to setup 258 for the "Minimum Number of Errors before a notification is sent" and 72 for the "Hours before an Error Message is sent. Your error profile would then look like this:

#### Enhancement: Export printers extended with the installation date

When exporting printers from PSM, you can now choose to export the date when a device was first added to PSM.

	Filter	
Filter Devices with Host Name / IP Address		
Filter Devices with Printer Name		
Filter Devices with Profile (Model) Filter Devices with Profile (Model) (e.g. HP*)		~
Filter Devices with Contact Person	i i	
Filter Devices with Location		
Filter Asset Number		
Filter Email Address of Printer Owner		
Filter Devices in Group 1	-	V
Filter Devices in Group 2	-	~
Error Notification Group	-	~
Filter Devices in the Toner Service Group	-	~
Filter Devices in the Supplier Group	-	~
Filter Devices with Counter Profile	-	~
Filter Devices with Error Control Profile 1	-	~
Filter Devices with Error Control Profile 2		~
Filter Devices with SNMP Read-Community Name		
Filter Devices with SNMP Write-Community Name		
Export 1st install date in PSM	[ ]	

#### **Enhancement: Printer profile renaming**

Printer profiles can now be renamed. All printers using the old profile name will be changed to use the new name when a profile is renamed.

#### Change: Authorization for manual orders

Manual orders at printer level has been allowed for users who have the "Stock Administration" right.

#### Bug Fix Rollback: Fully qualified host names did not work with import / auto-import

The bug fix implemented in 6.19 has been removed for auto-import, since the fix has a negative impact, when importing printers by using pre-defined hostnames.





# PSM Software Version 6.20 - 7th of April 2015

#### **Enhancement: Mail queue implemented**

The internal mail program was made to immediately deliver the mails to the mail server specified in the administration section. However, when the mail server has a problem, is offline, or not configured to relay mail, the mail was lost.

We have implemented an internal queue to keep back the mail in case it cannot be delivered. The following rules apply:

- The mail queue is implemented for alerts (toner alerts, printer error message alerts), orders and reports.
- If the mail server does not accept the mail sent by PSM, the mail will be queued.
- The retry interval is the same as specified for printer queries
- If only certain recipients are rejected by the mail server, PSM will deliver the allowed recipients, and queue the mail for those recipients not accepted by the mailserver
- The mails will be automatically removed from the queue, once PSM was able to deliver.
- The mail queue can be accessed by admin or any user with superuser rights. They can delete entries in the queue.
- The mail body can be viewed by admin or any superusers.

The mail queue can be accessed from the "Program Administration and Scheduler" Menu.



You don't need to configure anything, the mail queue becomes operational as soon as you applied version 6.20 and did a reboot of PSM (or a scheduler service restart, if you are using the windows versions.

The logs have been extended with email status fields and the fields will be updated by the mail de-queue process, once a mail is transmitted by the scheduler.

147258	2015-04-05	20:33:00	prt069.sysprint.local	CNDTG2R10B	628		Delayed delivery by PSM mailer: 2015-04-05 - 21:00	stephan.schiegg@sysprint.ch steve@jsm.ch	Details
--------	------------	----------	-----------------------	------------	-----	--	---	---	---------







# PSM Software Version 6.19 - 8th of March 2015

#### Workaround: Toner Alerts not sent

For some HP devices, especially seen on CM6040 and M880, the remaining capacity value suddenly drops to -2, and minutes later again to a normal value. It seems to be a bug in the HP Firmware, since the same behavior is seen over the device EWS as well. (It has been reported to HP, but has not yet been acknowledged.) We programmed a workaround, to take this behavior into account.

#### Bug Fix: Multiple "part has been replaced" messages in the log (HP only)

For parts, where no percentage left is reported by the HP device (such as staple cartridges, which report only "OK" and "Empty"), multiple PSM has generated excessive "Part has been replaced" messages, which fill up the log. These messages will now be supressed.

#### Bug Fix: percentage remaining was not logged

The "percentage left" entry was not logged in the database, when a part was exchanged. This prevents reports for "average exchanged" from working, since the report has no data to gather from the log. This is fixed now. However it will work only for parts exchanged after Version 6.19 has been applied.

#### Bug Fix: Fully qualified host names did not work with import / auto-import

When the fully qualified host name option (FQHN) was selected in the administration section, PSM retrieved only the short host name, when devices were imported over the printer import or printer auto-import option. The two programs have been fixed to support the administrative preset.

#### **Bug Fix: Periodic reports did not execute**

Automatic periodic reports (every 2, 3 months or similar) did not execute. This has been fixed.

Change: 6-digit limitation for ticket- / order numbers increased to 10 digits

When 999999 was reached, older psm editions did not auto-increase the field length. The field length has been changed to allow up to 10 digits for the ticket- / order numbers.







# PSM Software Version 6.18 - 16th of November 2014

#### Enhancement: "Treat toner LOW status" as xx percent

Some consumables / devices cannot report exact remaining capacity levels at all or if below a certain level. This can cause misunderstandings in the consumable status view, because we treated "LOW" as 10%. Some users complained about this, because the affected printer pops up below the printers with less than 10% capacity. Now you can set (in the scheduler) how PSM should treat a "LOW" status. The ordered list will be viewed accordingly.

Description	Value		
Query Interval in Minutes	15	Last run: 10-11-2014 15:05	Values between 5 Minutes and 300 Minutes (5 Hours) are possible.
Minimal Network Traffic			Minimal Network Traffic means: Only one SNMP Session every 100 Milliseconds, and Page Counters only queried twice a Day
Network timeout in milliseconds for minumal network traffic	20 ms (20-5000)		
Number of simultaneous processes (1 - 8)	1		If higher than 1, PSM will devide the number of printers by the number of Processes and will quee them in separate processes. NOTE: This only works if you have 200 or more printers, and only fo automatic background processes!
1th Order sent at: (eg. 14:00)	14:00		Start Time and Interval of captured Orders. The starting Time can be setup individually, the Interv can be set from 5 Minutes to 300 Minutes (5 Hours).
Interval of Email sending in Hours	24	Last run: 07-11-2014 14:00	
Only Orders for one Printer for each Email			If you choose this Option, PSM will generate one Email for each Printer where there is something to order. If unchecked PSM will concatenate all Orders into a single Email (default).
Treat LOW toner status as xx %	10 % (1-30)		This affect the consumable status view sorting order only.

#### Enhancement: timeout between network queries in "Minimal Network Traffic" mode

PSM used an internal default of 20 milliseconds for queries. Now you can setup your own timeouts from 20ms up to 5'000 milliseconds. You should carefully consider the value. We do not recommend specify values over 100ms, especially if you have over 100 devices in PSM and use low intervals such a 5 minutes. You may want to split up the "number of simultaneous processes" to a higher value, in order to allow a full query of all printers to finish within the time specified in "Query Intervals in Minutes". If the full query cannot be completed within this time, the next processes may already start before the previous ones have been completed. This may lead to unpredictable results.

	N. 1		
Description	Value		
Query Interval in Minutes	15	Last run: 10-11-2014 15:05	Values between 5 Minutes and 300 Minutes (5 Hours) are possible.
Minimal Network Traffic	~		Minimal Network Traffic means: Only one SNMP Session every 100 Milliseconds, and Page Counters only queried twice a Day
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Only Orders for one Printer for each Email			If you choose this Option, PSM will generate one Email for each Printer where there is somethin to order. If unchecked PSM will concatenate all Orders into a single Email (default).
Treat LOW toner status as xx %	10 % (1-30)		This affect the consumable status view sorting order only.

#### **Enhancement: Database checks**

Manage Scheduled Tasks 💡

PSM did only check the MySQL databases on reboot or service restart. The scheduler now automatically checks the MySQL table every 10th time (or at least once a day) when a query is executed, and starts a "repair table" if it finds corrupt tables.

#### Enhancement: Support of an external MySQL Server

Some users have their own MvSQL server and would like to use it, instead of the internal database. This is now possible. The procedure is easy, however it requires some extra knowledge. That is why we don't publish the documentation to do this in public. If you want to use an external MySQL database server, please contact us.







#### Enhancement: Text on orders for manually ordered parts

In version, we introduced the "manual order" button, which allows to manually order parts, even if the threshold has not been reached. However, on the order emails it was not visible, if it was a manual order or not. In this version, you will see the time, user and workstation of the person who has initiated the order.







# PSM Software Version 6.17 – 26th of August 2014

Change: columns changed in the consumable device status view

Many of you did not like the change made in 6.16 (fields "last successful query", "page counter", and "printer model" has been moved rightmost in 6.16). We changed it back to what is was originally. For the ones who wanted to have the change, it is still possible to change it permanently (switch between the original and the new view introduced in 6.16).

You can change it by entering the following string after the URL:

http://supply/wrkprt2.php?alternativeView=1

The value "0" means original view, while the value "1" means new view. After upgrading to 6.17, "0" is the default.

#### Bug Fix: From / To dates could not be changed in the report definitions

Many of you are using the reporting section to generate automatic reports, but use the same report definitions also to generate manual reports. It was not possible to preset the from-to dates for automatic reports. This limitation has been removed

Bug Fix: attachment with current printer status sometimes missing on "Daily test mails"

Due to a timing issue, the attachment was sometimes missing, especially when there were no orders to be sent. The report generator was not finished when the email was sent. A 6 seconds delay has been added.

# PSM Software Version 6.16 – 5fth of August 2014

#### Enhancement: French online help

The online help text for the French language has been translated and implemented.

#### Change: columns changed in the consumable device status view

The fields "last successful query", "page counter", and "printer model" has been moved rightmost. This affects also the file which is attached on the "daily test email". The reason for the change is, that consumable operators have requested the change, because they need to see the printer address and the consumable parts first. This change has already been made for the export file in version 6.15.

#### **PSM Windows: important service note!**

The digital certificate, which has been used in PSM for Windows has been stolen and abused to create malware programs, signed with the stolen certificate. This doesn't mean, that you are affected by malware or viruses because of PSM. But it means, that we have to revoke the certificate, which has been used to sign the PSM installers.

In some cases - when the digital certificate is checked online by your server, this may render PSM for windows to no longer work. We have prepared an additional service notes, which are describing the steps needed to backup PSM, uninstall the current version and install the new version. Prior to this, please upgrade your existing PSM for Windows to this version.

Please note, that PSM Boxes / Rack Appliances / VMWare Versions are not affected. Only PSM for Windows is.

We are sorry for any inconvenience this may cause you.





# PSM Software Version 6.15 - 21st of June 2014

#### **Enhancement: Manual order submission**

Orders can be submitted manually now by clicking on the "Manual order" button in the printer detail view, section "Consumable status report". This will cause the part to be ordered on the next scheduled time for orders. We've been asked to implement this from several sites. One reason is, that - if for example a toner has been replaced not because it was empty, but because it was defective, a new toner was only orderable by phone.

The time, user, and workstation name of the person who issues the manual order, will be logged.

Consumable	onsumable Status Report												
Consumables hist	onsumables history and orders 🔍												
Part Number	Consumable Description	Threshold Value (%) (for Orders)	Part below Threshold? (for Orders)	Order sent Date	Remaining Capacity	Remaining Capacity ( % )	Maximum Capacity	Manual order					
CF325X	Patrone Schwarz 25X HP CF325X	20	N		100	100 %	100	Manual order					
C2H57A	Wartungskit HP 110V-C2H67A, 220V-C2H57A	20	N		100	100 %	100	Manual order					
C1P70A	Vorlageneinzugskit HP C1P70A	20	N		100	100 %	100	Manual order					
P None	Walzen reinigen HP None	20	N		100	100 %	100	Manual order					
C8091A	Hefter 1 HP C8091A	20	N		ок	n/a	unknown	Manual order					

#### Enhancement: Printer reboot (HP enterprise series printers / mfp's only)

A printer reboot can be requested from within PSM. In the detailed printer view, you will see an additional icon described as "reboot printer". If clicked, you will be asked for the SNMP write community name (which is usually the same as the embedded web server password). If entered correctly, PSM will send a SNMP set command, which causes the printer to reboot. Please note, that this only works on HP enterprise series printers and mfp's.

The reboot function is provided "as is", there is no guarantee that it will work on all models.

#### Change: columns changed in the consumable device status view export file

The fields "last successful query", "page counter", and "printer model" has been moved rightmost. This affects also the file which is attached on the "daily test email". The reason for the change is, that consumable operators have requested the change, because they need to see the printer address and the consumable parts first.

#### Change: columns changed in the reporting section, reports type 1 & 2

The column "number of times the device has gone offline" has been removed and replaced by "last successful query". The reason for this change is, that nobody ever needed that column, since "offline" is contained in the "number of errors" already, when enabled in the error profile. "last successful query" is much more useful, because it allows you to see, if a device was not communicating for a longer time period.

#### Change: "Consumables ordered so far" moved to a separate screen

The "Consumables ordered so far" table was on the printer detail view in the past.

Part Number	Consumable Description	Quantity	Last remaining	Date of last replacement	Page Coast at last Replacement	Average replaced at	Consumables Hindory
CE400A	Patrone Schwarz 507A HP CE400A		nia	27-06-2013 / 15:20:00	0	0%	a,
CE401A	Patrone Cyan 507A HP CE401A		nik	nia	nia	0%	9
CE403A	Patrone Magenta 507A HP CE403A		nia	nia	nia	0%	۹,
CE402A	Patrone Gelb-507A HP CE402A		nia	n'a	nia	0%	۹.
CESOSA	Faderanit HP 110V-CE404A, 220V-CE505A	0	nia	ala.	nia	0 %	۹,
	Consumables History						۹,

Since calculation and database / log queries are involved in this section, the performance dramatically decreased when there are a lot of log entries. This affected everybody who just wanted to see quickly the detailed status.

The consumable history page can now be called from within the detailed printer view:

Part Number	Consumable Description			Order sent Date	Remaining Capacity	Remaining Capacity (%)	Maximum Capacity	Manual order
CF325X	Patrone Schwarz 25X HP CF325X	20	N		100	100 %	100	Manual order
C2H57A	Wartungskit HP 110V-C2H67A, 220V-C2H57A	20	N		100	100 %	100	Manual order
C1P70A	Vortageneinzugskit HP C1P70A	20	N		100	100 %	100	Manual order
P None	Watzen reinigen HP None	20	N		100	100 %	100	Manual order
C8091A	Helter 1 HP C8091A	20	N		ок	n/a	unionown	Manual order

mahies history and orders



# SysPrint AG State of the Art printing



#### Bug fix: printer status not detected on HP futuresmart devices in deep sleep

When a HP device with HP futuresmart firmware > 3.0 entered deep sleep mode, PSM did no longer query the device. Devices which already had status "yellow" (consumable low warning), went back to "white" (everything ok). The reason is, that the SNMP status readback now reports "other" instead of "idle", as it did with earlier firmware and on older devices. PSM has been changed to take care of this new behavior.

#### Bug fix: Daily test email did not contain attachment when "only 1 email per printer" is selected

Fixed, the attachment is now contained also, when "only 1 email per printer" is selected.

#### Bug fix: "Stock" printers were calculated into the number of licensed printers

The number of licensed printers (currently using a license) will now only contain active devices. Devices which are "on stock" and not actively queried, will no longer use a license.

#### Bug fix: Reporting section - Filter on counter profiles did not work

The filter on counter profiles ("only devices within the following counter profile:") did not work in the reporting section for type 3/4 reports. This has been fixed.





## PSM Software Version 6.13 - 25ft of April 2014

#### **Bug Fix: LDAP rights**

The "printer admin" rights have been correctly detected from the LDAP group membership, but did not work in PSM. This is corrected now.

#### Bug Fix: Monthly counters not visible over webbrowser (PSM Windows only)

Due to a wrong link, the old style csv reports, which can be viewed over the scheduler, were not shown over the web gui. The link has been corrected.

#### **Bug Fix: Some "Develop" device detection**

Some develop devices were not detected correctly by PSM, therefore the wrong serial number was gueried from the device. Some enhancements have been implemented to allow better detection. However it may still be possible, that a view devices will not identify themselves correctly, since there is no MIB entry called "develop". (Develop is a sub brand of another manufacturer).

## PSM Software Version 6.12 - 6th of March 2014

#### **Bug Fix: Reports and evaluations**

The "Automatic daily query" and the "Automatic weekly query" reports gave wrong results. The results for the daily query contained the last two days instead of only the last day. The results for the weekly query contained 1 week + 1 day instead of only the last week. This has been corrected now.

#### To avoid confusion, here's a tutorial on how the reporting works:

Each night, between 23:40 and 23:59 there is a process running, which takes the latest counters for each printer and writes it to a printer specific table (one table per printer).

The query generator inside PSM always counts - 1 day from a given start date, regardless if the generator is started with a manual query or an automatic query. This is because the beginning if a specific day is equal to the day before (because it was written before midnight, with "the day before" date.

Example: You want to know, how much has been printed on the 3rd of march: In this case you would need to enter the 03-03-2014 for both, start and end date. The report generator will internally go one day back in the database, because we need the counters from the 2nd of march 23:59 until the 3rd of march 23:59.

Regarding the automatic reports: The automatic reports are executed AFTER midnight. Since the report generator already does the "start day -1" the automatic reports will be executed with:

"start day = current date - 1 day" for the daily report "start day = current date - 1 week" for the weekly report "start day = current date - 1 month" for the monthly report ... and so on.

The end will automatically be the latest available entry (in this case "yesterday")







## PSM Software Version 6.11 – 11th of February 2014

#### **Enhancement: Support for Develop Devices**

Develop is a sub-brand of Lexmark, but has some exceptions, such as the Manufacturer, which is shown only as "generic". Also the serial number is stored in a non standard location. PSM now contains the necessary modification to handle these devices more correctly.

#### Enhancement: Reporting Feature: Daily reports

Automatic daily reports have been added to the reporting section.

#### Bug fix: PSM for Windows: No update possible / License import problems

We have addresses this issue earlier, but unfortunately there is a bug in the bugfix, which causes the initial problem not to be fixed (Version 6.08). We apologize for that. The fix for the Problem described below is now finally included correctly. If you cannot upgrade, please follow the link below. Thank you.

Because of a timing issue, it sometimes happened, that the import program was deleted during the installation of a new version, but not recreated out of the ZIP archive. Updating was no longer possible. If you experience a "404-Page-Not-Found" error, when you want to update, please follow the patch installation described here: http://partner.sysprint.ch/n forum/viewthread.php?boardid=2&thid=68

#### Bug fix: LDAP "groupadmin" was missing

Even when specified, the group admin rights did not work in PSM, when used with LDAP authentication. This has been corrected.

## PSM Software Version 6.09 – 19th of January 2014

### Enhancement / Bug-Fix: Auto-Import: Reduced queries

When auto-import from a SMB or FTP source was enabled, PSM did continuously query each printed for its model location, contact, serial number and consumable mibs. This information was used in the manual export.

The intention of this was, that the customer was able to import he's own printer model names, rather than using the one queried from PSM. But if the imported information was wrong, the customer had no way of knowing it. That is why we introduced this query approximately one year ago. The real printer model found in the network was written into an additional database field and could be exported and compared.

However, this method is great for a customer who starts using auto import. But once the database is accurate, this guery is no longer needed, and it is generating aproximately 60% more network traffic compared to normal.

By installing this or a later version, this feature will become disabled. It can be re-enabled if needed, over the add-printer menu, in the section where the import parameters are specified.







## PSM Software Version 6.08 – 7th of December 2013

#### Improved: Printer profile handling

In the past, when the printer model was changed - for example from a color printer to a monochrome printer, the tables still contained the values for the color printer for amount of parts not present on a monochrome printer. (For example if your color printer had 12 consumables, but the monochrome only has 1). This will now be checked by PSM and corrected within the next query.

If one or more lines were omitted in the profile, or did not had a MIB specified, PSM only gueried parts up to this line. All parts specified after the omitted line were ignored. This has been changed. PSM checks the validity of each line, ignores invalid lines, but still processes every remaining valid line.

This also fixes the situation, when you put in a zero threshold for example for the cvan toner (if you don't want PSM to order the cyan toner, because you still have some on stock). The 0 value for the cyan toner then caused every part specified below to be ignored as well, which was wrong. This has been corrected too.

#### Improved: CALC feature: handling of invalid printer responses

The CALC feature completely relies on ordering by the amount of pages printed. The Feature was made for printers which are not capable of reporting LOW levels. The whole counting and calculation is dependent on what we get from the printer engine counter, which is queried by SNMP. It turned out, that in some situations, the printer suddenly returns 0 (zero). This caused the whole calculation to fail and triggered a new order, once the printer went back to normal and returned the correct page count. PSM now ignores zero or empty values for the page counter, in order to not interrupt the calculation.

Also the PSM log has been enhanced. The "Part has been replaced" now also shows the "next empty" pages value.

#### Bug fix: False email addresses in error messages / toner service alerts

In a situation, where during one query process, PSM detected alerts and/or error messages to be sent for more than one printer, and the alert destinations / recipients were not the same, PSM mixed up the recipients. While the first email sent was correct, any subsequent email contained the recipients for the first email as well.

The cause was the distribution list array, which was not emptied after each printer query. This has been corrected.

#### Bug fix: Consumable status view sorting order

The consumable status view sorting order was not correct, if the status for one or more parts = unknown. If sorted by "show lowest consumable level first", the "unknown" capacity left was treated as 0 and came out on top of the list. This has been corrected. In the consumable status view, "unknown" will now be treated as 50% full for the sorting.

#### Bug fix: PSM for Windows: No update possible / License import problems

Because of a timing issue, it sometimes happened, that the import program was deleted during the installation of a new version, but not recreated out of the ZIP archive. Updating was no longer possible. If you experience a "404-Page-Not-Found" error, when you want to update, please follow the patch installation described here: http://partner.sysprint.ch/n\_forum/viewthread.php?boardid=2&thid=68

After installing Version 6.08, this will no longer happen. PSM will automatically recreate the import program from a backup file to avoid losing the program.

#### **Bug fix: PSM for Windows: License import problems**

PSM did not delete the old license file from the disk when a new one has been imported. The PSM license program always looks for the first available license file with the filetype .pbl. If the old license file had a lower number, PSM still worked with the old license file. Old license files had to be deleted manually to overcome the problem. This has been corrected. Importing a new license now automatically deletes any old .pbl file.







## PSM Software Version 6.07 - 28th of October 2013

#### Enhancement: Additional variables for Toner Service Email Subject

In version 6.06, we introduced the possibility to have a variable subject on all groups, to be able to deliver certain information already in the email subject. For the Toner Service email this has been further enhanced.

- %I for the threshold which has been set in the profile (in percent)
- %t for the remaining capacity (in percent, or as a status, such as "LOW") ٠
- %n for the consumable part number .
- for the consumable part description %d

Please remember, that this only applies to the Toner Service Group!

#### **Design Change: Printer Administration and Consumable Status View**

The consumable status view screen has the possibility to limit the number of devices per page since a long time. This has now also been implemented on the printer administration GUI.

Additionally, the Buttons "Back", "Save Filters" and "Add Printers" have been replaced by icons. Additionally a refresh icon has been placed, to allow refreshing the current screen without having to re-enter it from the main menu.

Manage Printers 0														
Group 1 Filter				Group	2 Filter			$\checkmark$						
Toner Service Group				✓ Consu	mables Supplier			~						
Generic Free Search Filter (eg. *laser*)				Show 1	Foner Levels	Show Printers with Warnin Show only Printers not rea Show Inactive Stock/Spare	achable today							
12 🖸 🗟 🖨 ┥	-	_					Number	of Lines per Page :	10000 🗸	1 - 14	(Total: 14	•	<	<b>&gt;</b> »
IP Address / Host Name		▲ Asset	Contact Person	<ul> <li>Location</li> </ul>	Serial Number	Printer Model	▲ Page ▼ Counter	Last succesful Query	<u>.</u> 8.			M		
192.168.200.141 pri	t141			Demoraum	VNBVDCV1WW	hp laserjet flow mfp m525	3	24-04-2013 / 18:40	100 %				٩	×

### Enhancement: Handling for non-standard MIB replies in the MIB for consumable remaining Level

Some manufacturers still do not behave according to the RFC standards, when it comes to deliver the remaining levels for the consumables. We have introduced already a lot of handling exceptions for many manufacturers. However, it still does not always cover all printer models out in the market.

In order to allow you to adapt the printer profile, to handle non standard return answers for the remaining capacity levels, we have made some modifications in the program.

#### Example:

Situation:

You have a printer, which reports the remaining level the following way:

- between 25% and 100% remaining, the printer reports the correct levels (i.e. 50, 30 and so on)
- between 24% and 6% remaining, the printer reports "-2"
- between 5% and 1% remaining, the printer reports "-3"
- when empty, the printer reports "0"

#### Target:

- You want PSM to show 10% remaining capacity, when the printer delivers "-2"
- You want PSM to show 4% remaining capacity, when the printer delivers "-3"
- You want PSM to show 0% remaining capacity, when the printer delivers "0"



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#### To achieve this, you can setup the corresponding consumable part the following way:

Part Number	Consumable Description	Threshold Value (%) (for Orders)	Threshold Value (%) (Tonerservice)	Maximum Capacity	Printer MIB to retrieve the remaining Pages
Black Toner	Black Toner	20	5	100	REPLACE%.1.3.6.1.2.1.43.11.1.1.9.1.1%-2.10-3.4
Maintenance Kit	Maintenance Kit	20	5	220000	.1.3.6.1.2.1.43.11.1.1.9.1.2

- REPLACE (in uppercase) tells PSM to use the "replacement feature"
- % is the separator for the replacement feature
- .1.3.6.1.2.1.43.11.1.1.9.1.1 is the printer MIB to be queried •
- % is the separator for the replacement feature
- Now you can define the values to search for, and the values to replace with:
  - 1st replacement: -2 will be searched, and if found, it will be replaced by 10 0
  - ; is the separator for the search and replace group 0
  - 2nd replacement: -3 will be searched, and if found, it will be replaced by 4 0

considering the example, this makes PSM think, that there is 10 left of the maximum of 100 (10%) when the printer reports -2, and 4 left out of 100 (4%) when the printer reports -3. 0 does not need to be replaced, because 0 will be treated as 0% anyway.

You can define as many replacements as you need, but the whole String may not be longer than 240 characters in total.

#### Bug Fix: Double Orders were possible, when the CALC Feature was used

When the CALC Feature was used, especially in combination with MIB, double orders and double alerts could happen. This has been fixed, the "Pages between 2 orders" from the printer profile will now also work for the alerts, and for the orders, if triggered by MIB.

#### **Bug Fix: Double Toner Service alerts prevention**

So far, the "Pages between 2 orders" value, which can be specified in the printer profile has applied only to orders (to prevent double orders, when the printer reports a positive value, while the toner is below threshold.

Now, the protection also applies to the Toner Service Alert messages, to prevent multiple alerts.

#### Bug Fix: Page counts not logged for some messages

PSM did not log the actual page count for some message. Only "0" was logged. This was because at the stage when some kind of messages are generated, the page count was not yet queried, and therefore was empty. We have changed the program, so the page count will be queried as one of the first steps, before the consumable levels are queried, to make sure that the page count will be written in the log.







## PSM Software Version 6.06 - 23rd of September 2013

#### Enhancement: Variable email subject for all groups

So far, the subject was variable only for the order-emails, and a specific subject was only possible on the suppliers group. This has been enhanced. You can now define individual subjects on all groups. Additionally you can use some variables to include certain PSM information on the email subject line. This makes it easier parsing emails, for example if you are using automatic email parsing or outlook filters. The possible variables and their meaning are:

- %h hostname/ip address .
- %р printer name .
- %s printer serial number
- %a asset number
- printer contact person %с
- %| printer location

#### Example:

If you specify for the subject of an Error group "Printer error on printer %p at address %h - serial number: %s" this would result in (for example): "Printer error on printer P101 at address 192.168.2.22 - serial number: CKD3455"

#### Limitations:

For the supplier group, the variables can only used, if you have setup "only orders for one printer for each email" in the PSM scheduler definitions.

#### **Enhancement: Consumable status view**

Beside the already existing checkbox "Show Lowest Consumable Levels first", we have added an additional checkbox " Show Lowest Consumable Levels first (exclusively)". This will reduce the list: Only devices with status "yellow" (printers for which an order or a consumable warning exists) will be displayed.

The consumable status view now also contains the printer name.

#### Enhancement: Daily test mail > daily status mail

The daily test mail has been changed to daily status mail. New: the mail also includes the consumable status as a xls attachment file. The number of characters for the status mail email address field has been increased from 60 to 240.

#### **Change: Auto import**

For those who use the automatic printer import feature and only deliver a list of IP addresses and printer models (without serial number), PSM did automatically insert printers not reachable at the time of the import, with an empty serial number, if the profile was present. PSM tried during the day to get a serial number. The behavior has been changed: if the printer is unreachable during the import, psm will create a dummy serial number

("temp-ipaddress"). This will be updated automatically as soon as the printer is reachable during one of the next automatic imports.

#### Bug fix: "excel" and "csv" buttons in the reporting section (PSM windows only)

The "excel" and "csv" buttons in the reporting section did not work. The link behind was hardcoded for the linux version. We've changed the link, to make it working also for the windows version.







## PSM Software Version 6.05 – 1st of June 2013

#### New PSM Variant available: PSM for Windows is officially released

The beta test phase on PSM for Windows has been finished. Thanks to all beta testers for their effort! PSM for Windows is now officially available and can be downloaded from the Forum.

#### Beta Testers:

Users, who have participated in the Beta Tests can continue to use their installation. Since there were no bugs detected which would require to generate new installer programs, you can use the regular updates over the Web GUI to update to the latest Versions.

Users who want to migrate to the windows version:

If you already have a Linux based PSM Lite, PSM Appliance, or PSM VMWare Version, and you want to migrate to the windows version, you can do that free of charge. It is possible to migrate from a linux to a windows version without losing any data. The detailed procedures and requirements are described on our forum Topic "PSM for Windows". Also, the files can be downloaded directly from the forum.

PSM for windows is supported on Microsoft Server 2008 R2 and Server 2012, 64 Bit.

#### Enhancement: Number of columns for calculation increased from 4 to 9

The number of possible columns to be calculated in the counter profiles have been increased from 4 to 9. This makes it possible (for example) to calculate in column 2 the total from columns 7 to 15 by entering: =7;+;8;+;8;+;10;+;11;+;12;+;13;+;14;+;15

#### Enhancement: Auto Import - Optional "end of file" control string

For the automatic import of printers, it is now possible to specify an end of file control string. This has two advantages:

- It serves as a control mechanism: if the string is not detected in the input file, the file is considered invalid.

- If you also check the "delete printers not in the import file" checkmark, the control string prevents the database

from being deleted accidentally by importing an empty or invalid file.

The usage is optional. If you do not specify an end of file string, PSM will continue to work without this additional check.

#### Enhancement: Email alert when automatic backup fails

When the automatic backup failed (for example because the password of the FTP/SMB user expired, PSM did only write this event to the system log and psm log. Now, the general email recipient will also be notified by email.

#### Bug Fix: Corrected some errors in the french language file

In the french language files there were some missing and some wrong texts. They have been corrected.

#### Bug Fix: A leading or trailing space character in a printer profile caused the reports to fail

When a user by mistake entered a space at the beginning or at the end of a part number, it caused the reports to crash. This affected the Reporting feature report type 4 and the old style statistics, and has been corrected.

#### Bug Fix: Temporary backup files not removed when automatic backup was activated

PSM did not remove temporary backup files in the local folder, when automatic backup was activated, even if the backup itself was successful. This has been corrected, temporary files will now be removed





#### Bug Fix: LDAP auto-created users did not have default groups

When LDAP authentication was activated and a new user (non-superuser) logged in to PSM, he had no choice to for any filters in the printer- or consumable administration screen. This was because the default allowed groups "ALL" has not been assigned by PSM. This has been corrected. By default, the User will have ALL groups available. This fix will automatically fix LDAP created users as well: During login it will be checked if there are any groups configured. If not, PSM will set the allowed groups to ALL. If there are already specific groups configured for the user, PSM will not touch the configuration.

#### Bug Fix: (PSM Windows Beta Versions were affected only)

The windows snmp library is slightly different from the one in linux. During the printer queries, the MAC address is queried. On some HP devices (depending on their firmware) the MAC address is returned in binary which causes strange characters displayed in the report type 1&2, instead of the 12 digit MAC address. Under certain circumstances, when the ASCII representation had a " character in it, it caused the printer query to fail, because " is reserved for database operations. PSM now does a check and converts from binary to hex if the snmp query returned binary. Also the " character has been suppressed to avoid crashes while writing to the database.

### PSM Software Version 6.04 – 4th of March 2013

#### Bug Fix: HP LaserJet CP1515 and CP1525 do not show correct toner levels

With HP, we've implemented an additional security rule, which prevents devices which have a device status other than "idle" or "printing" from being updated. The reason for this is, that certain HP devices do not report correct toner levels during warmup or error status. Unfortunately, some of the above mentioned models do not report a device status of "idle". This causes that these devices are not updated.

This fix causes the above mentioned models to be updated anyway, regardless of the device status.

Note: This fix is available for both, regular Linux based PSM, and PSM-Beta for Windows.





## PSM Software Version 6.03 – 21th of February 2013

#### Please read before you update

Version 6.03 is a major update to version 5. The code base had to be modified in order to make a PSM version for windows possible. That is why we recommend to make a backup before you do an update.

#### Minimum requirements

Your PSM needs to run on a Version 5.xx to run this upgrade. DO NOT attempt to install this update on a version prior to 5.01. If you got an older version, please first upgrade to version 5.40 before installing version 6.03.

#### Verify that the update has been performed !

There are situations on which the update does not perform the database update correctly. DO NOT REBOOT YET! The usual message, that the upgrade has been performed could be incorrect.

To check, that the upgrade really finished completely, please right click on the Title "Printer Supply Monitor" and select "open in new tab".

On the new tab, verify that the Version really reads 6.03 !



If the version does NOT read 6.03, please perform the update again. The second time it will definitely work.







#### Changed program code / code sharing with PSM for Windows

So far all PSM versions were Linux based. Over the years there have been several linux images, starting from SuSE 9, over Ubuntu 6.10, until the latest Ubuntu 12.04 LTS. We have made hardware based appliances as well as images to be used with VMWare.

Linux has proved itself to be a stable and reliable OS platform for PSM, and we will of course continue on Linux. However, there are companies which cannot use Linux based images. Not because their VMWare servers cannot do it, but because their company policy only allow windows based servers.

We have reacted to this request, and will release a PSM Version for Windows 2008 R2 and Windows 2012 Servers (64-Bit Versions only). PSM for Windows will run under the built in IIS 7.5 / 8.0.

In order to have the same program code for both, Linux and Windows based PSM we had to do a lot of modifications to make the PSM code running on both operating Systems. One mayor change is the way we handle requests which need additional privileges. While on a closed Linux appliance this is easy to achieve, it is much more tricky on windows, without violating any security rules. On Linux we used a standard path for the PSM Program. On Windows this path can vary. So we had to program all path related operations dynamically rather than static hardcoded. This also affects background operations, such as background queries for new printers. For such operations the whole scheduler part of PSM had to be re-designed, because under windows it is only possible to do such things when running under the local system account as a service.

PSM for Windows will be released in late Spring this Year, while the Beta Tests will start right now.

#### For those of you who are interested to become a Beta Test Site, just let us know.

Note: If you are interested in migrating from Linux based to Windows based: It is possible to backup an existing Linux installation and import it into the Windows version (but not backward).

#### **Future plans**

We will continue development on the basic PSM code. New releases will always come as a zip package for Windows based PSM's, and continue to come as tar package for the Linux variants. So the features PSM code developed will be available for both versions, and will share the same program code.

However for the Windows version we have planned to extend PSM with another (Windows based) development we made. This add on (which will come as an option later this year or beginning of 2014) will allow more than just consumable management. It will allow you to generate print queues (including configuration) on Windows servers. This will make PSM for Windows a powerful vendor independent tool. Stay tuned for more..

#### Version 6 not supported on old Hardware and first VMWare Image (SuSe based)

We were successful in the past in keeping the program code within the size of 2MB. Starting with Version 6 the update Packages will be between 2 and 5MB. This will exceed the upload max filesize on the very first PSM Hardware appliance. Nothing bad will happen when you try to load version 6, it will simply not install. For those of you who still own one of the first Hardware and VMWare appliances (5 Years or older) and would like to benefit from future upgrades, please drop us a mail. We can offer you to exchange your old unit at the price of the bare hardware (around CHF 950). If you got an old VMWare image, you can just download the latest image from there and use the same license. Or maybe you may want to consider to change to the Windows Version, which will be officially released in spring this Year.



# SysPrint AG State of the Art printing



### Enhancements: AD/LDAP groups can be setup dynamically

In Version 5.31 (December 2011) we introduced support for AD/LDAP users inside PSM. Newer PSM Images support AD/LDAP Authentication. (See description in the Release Note for Version 5.31). Some companies who want to use this possibility have strict rules on how the groups are named. Therefore they were not able to use the PSM group names:

Windows Group	Access Rights
<ul> <li>psmusers</li> <li>psmprinteradmin</li> <li>psmprofileadmin</li> <li>psmerroradmin</li> <li>psmcounteradmin</li> <li>psmgroupadmin</li> <li>psmlogistics</li> <li>psmsuperusers</li> </ul>	read only access, no specific rights =psmusers + write access to create / change / delete printers =psmusers + write access to create / change / delete printer profiles =psmusers + write access to create / change / delete error routines =psmusers + write access to create / change / delete counter profiles =psmusers + write access to create / change / delete groups =psmusers + write access to create / change / delete groups =psmusers + write access to the logistic menu (if feature present and configured) write access to all psm admin functions except network setup and restore

To allow more flexibility, we have extended the Scheme, allowing you to link the PSM group structure to group names existing in your company.

LDAP Auth	entication	(optional)
ED/1 /tutil	onaouaon	(opuonai)

	Permanent Settings	Remarks
Activated		if checked, LDAP Access has been tested and verified
LDAP Servername or IP Address	sysprint-vmsrv	usually the Domain Controller Hostname
LDAP Server Port	389	usually 389
SSL		use SSL Encryption
Service User	SysprintBackup	Service User with the right to query the LDAP Server
Service User Password (already set)		Leave empty if already set
Base DN	CN=users,DC=sysprint,DC=local	Base DN, eg. CN=users,do=mydomain,do=local
User Suffix	@sysprint.local	Suffix for the Userid (eg. @mydomain.local). If not entered, the Users need to enter the full login eg. myuser@mydomain.local
AD/LDAP Group psmusers	G_CH_HelpdeskUsers	Read-only user rights in PSM
AD/LDAP Group psmprinteradmin	G_CH_PrinterOperator	+ can change printer settings
AD/LDAP Group <mark>psmprofileadmin</mark>	G_CH_PrinterOperator	+ can change printer profiles
AD/LDAP Group psmerroradmin	G_CH_PrinterOperator	+ can change error routines/profiles
AD/LDAP Group psmcounteradmin	G_CH_PrinterOperator	+ can change counter profiles
AD/LDAP Group psmgroupadmin	G_CH_PrinterOperator	+ can manage groups
AD/LDAP Group psmlogistics	G_CH_SupplyManagement	+ can use the logistics area
AD/LDAP Group psmsuperusers	G_CH_PrinterAdmin	Can do most of the tasks the admin can do, except restore and change network settings. If the user is a member of this group, the above memberships are ignored

#### Enhancement: Order / Toner Alert / Error Message triggering without sending

Under some circumstances it may be wanted that PSM does not send out the usual Email for alerts or toner orders, but you still want to have it logged for history reasons.

The Supplier, Error Message, and Toner Service Alert Groups now allow to use the String "DontSend" to be defined instead of a valid email address. PSM will treat a device to such a group no different than any other, but it will suppress the email sending.

#### **Enhancement: Order Log**

The order Log has two added columns: "Status" and "To". This allows you to check if the order has been sent, and to who was addressed. Additionally you also see suppressed orders (the one just mentioned in the Enhancement before, where "DontSend" is specified as the email address.

Order- Number	Order- Date	Affected Printers - IP Address or IP Host Name	Status	To:	
		PRT062.SYSPRINT.LOCAL;	Order sent by email	steve@sysprint.ch,	Details
100010	18-02- 2013	192.168.200.53;PRT058.SYSPRINT.LOCAL;	Order sent by email	steve@sysprint.ch,	Details
100009	17-02- 2013	PRT062.SYSPRINT.LOCAL;	Order suppressed	DontSend	Details





#### **Enhancement: Scheduler changes**

While on all PSM Linux Versions we started up a scheduler Task, which initiated the automatic functions such as printer queries, reports, cleanup and so on, we have to use a Service on PSM for Windows. Some functions, such as printer queries, batch scanning for new printers, manual order submission are also possible to start over the PSM GUI. In Windows, there is no way to allow such functions without assigning a privileged user inside IIS. To avoid this, we have decided to re-design the PSM Scheduler, which runs on the local system account in Windows, and with admin rights on Linux. The PSM scheduler will now also handle user initiated tasks. This means, that if you do a background scan for new printers, or initiate a manual printer query, this job will be submitted to the PSM scheduler. The scheduler will start this task with a maximum delay of 60 seconds after you submitted the job.

Performing the tasks under the scheduler also allows you to control the current status of a job in the PSM scheduler menu. You can also cancel a job from there. The scheduler will set a cancelled flag, which is read by the program, which is executing. This allows to terminate within only a view seconds, without killing the job forcibly.

#### Bug Fix: Auto/Manual - Import with your own printer model names (Lexmark)

When you are using the auto-import or manual import of printers, you can decide whether or not you want to use the printer model names specified in the import file, or let PSM detect the printer model. If you choose to use your own name, and Lexmark printers are defined as for example "X-546" instead of "Lexmark X-546", PSM would not perform any order for these devices. The reason for this is, that Lexmark is using a non-standard SNMP scheme for the Toners. PSM will pay attention to it, if it knows that it is a Lexmark printer. When you are using a printer model name, which does not start with "Lexmark..." PSM did use the standard SNMP scheme.

The program has been changed to query the printer vendor, if auto-import is active, and it will detect that it is a Lexmark printer and use the correct scheme. Attention: If you do a manual import (when auto-import is disabled), you still have to make sure, that the model name starts with "Lexmark". We only query if auto-import is active.

## PSM Software Version 5.xx and older versions

Older versions have been moved to "PSM Release Notes Version 5 and older".

