



PSM Release Notes

PSM Software Version 6.24	– 18th of September 2015	.....	2
PSM Software Version 6.23	– 24th of August 2015	.....	4
PSM Software Version 6.21	– 5th of August 2015	.....	5
PSM Software Version 6.20	– 7th of April 2015	.....	6
PSM Software Version 6.19	– 8th of March 2015	.....	7
PSM Software Version 6.18	– 16th of November 2014	.....	8
PSM Software Version 6.17	– 26th of August 2014	.....	10
PSM Software Version 6.16	– 5th of August 2014	.....	10
PSM Software Version 6.15	– 21st of June 2014	.....	11
PSM Software Version 6.13	– 25th of April 2014	.....	13
PSM Software Version 6.12	– 6th of March 2014	.....	13
PSM Software Version 6.11	– 11th of February 2014	.....	14
PSM Software Version 6.09	– 19th of January 2014	.....	14
PSM Software Version 6.08	– 7th of December 2013	.....	15
PSM Software Version 6.07	– 28th of October 2013	.....	16
PSM Software Version 6.06	– 23rd of September 2013	.....	18
PSM Software Version 6.05	– 1st of June 2013	.....	19
PSM Software Version 6.04	– 4th of March 2013	.....	20
PSM Software Version 6.03	– 21th of February 2013	.....	21
PSM Software Version 5.40	– 19th of December 2012	.....	25
PSM Software Version 5.39	– 1th of November 2012	.....	27
PSM Software Version 5.38	– 8th of October 2012	.....	28
PSM Software Version 5.37	– 14 of August 2012	.....	29
PSM Software Version 5.36	– 29 of May 2012	.....	30
PSM Software Version 5.35	– 14th of May 2012	.....	31
PSM Software Version 5.33	– 9th of January 2012	.....	33
PSM Software Version 5.32	– 23rd of December 2011	.....	33
PSM Software Version 5.31	– 12th of December 2011	.....	34
PSM Software Version 5.29	– 26th of August 2011	.....	37
PSM Software Version 5.28	– 30th of May 2011	.....	37
PSM Software Version 5.27	– 27th of April 2011	.....	38
PSM Software Version 5.26	– 20th of April 2011	.....	38
PSM Software Version 5.24	– 8th of December 2010	.....	40
PSM Software Version 5.23	– 25 of October 2010	.....	40
PSM Software Version 5.22	– 2nd of September 2010	.....	41
PSM Software Version 5.21	– 1st of June 2010	.....	42
PSM Software Version 5.20	– 26th of May 2010	.....	43
PSM Software Version 5.19	– 25th of May 2010	.....	43
PSM Software Version 5.18	– 17th of May 2010	.....	44
PSM Software Version 5.16	– 23th of April 2010	.....	45
PSM Software Version 5.15	– 8th of April 2010	.....	46
PSM Software Version 5.13	– 11th of January 2010	.....	48
PSM Software Version 5.11	– 29th of December 2009	.....	48
PSM Software Version 5.10	– 28th of December 2009	.....	49
PSM Software Version 5.07	– 30th of November 2009	.....	50
PSM Software Version 5.06	– 17th of November 2009	.....	50
PSM Software Version 5.04	– 5th of October 2009	.....	51
PSM Software Version 4.xx and older Versions		.....	56



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 queried, 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	Last run	
Query Interval in Minutes	15	09-09-2015 12:35	Values between 5 Minutes and 300 Minutes (5 Hours) are possible
Minimal Network Traffic	<input type="checkbox"/>		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 divide 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)	13:30		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).
Interval of Email sending in Hours	24	08-09-2015 13:30	
Only Orders for one Printer for each Email	<input type="checkbox"/>		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 LOWtoner status as xx%	10 % (1-30)		This affect the consumable status view sorting order only.
Daily status email	<input type="checkbox"/>		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.
Email addresses for the daily status email			
Total Reports at 1th of each month	<input checked="" type="checkbox"/>	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	<input type="checkbox"/>	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 Addresses for Statistic.
Separate Report for all Group2 Groups	<input type="checkbox"/>	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 Addresses for Statistic.
Separate Report for all Supplier Groups	<input type="checkbox"/>	Last run	Same as above, but one Email for each Supplier Group will be sent. This only works for those Groups with defined Email Addresses for Statistic.
Use 30 Counter Columns	<input type="checkbox"/>		This is for support / transition reasons only. Please do not change.

Save Changes



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 .**

The screenshot shows two parts of the PSM software interface. On the left is the 'Overview of existing Counter Profiles' window, which contains a table with columns for 'Counter Profile Name', 'Import selected', 'Change', 'Delete profile', and 'Export profile'. The table lists several profiles such as 'Abos IP C1435P', 'AUTO_RICOH', 'AUTO_SHARP', 'AUTO_XEROX', 'Canon i-ADV Series', 'Canon i-ADV Series-02', 'Hewlett-Packard', and 'Hewlett-Packard-02'. The 'Change', 'Delete profile', and 'Export profile' columns are highlighted in yellow. On the right is the 'Import a Counter Profile / Copy an existing Profile' dialog box, which has fields for 'Choose Profile to import (*.xml) (PSM Version >=6.24)', 'Choose Profile to import (*.counter) (PSM Version <6.24)', and 'Copy existing Profile'. It also includes 'Durchsuchen...' buttons, an 'Overwrite profiles?' checkbox, and 'Import now' and 'Copy profile' buttons.

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

Threshold Levels for Orders: If you Enter a value of Zero, the affected Part will be excluded from the Ordering Process.
Threshold Levels for Toner Service: If you leave the Field Empty or Enter a 0, the affected Part will be excluded from the Notification.
Printer Profile last checked at: 06-08-2015

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 Pages
CE400A	Patrone Schwarz 507A HP CE400A	20	3	5	100	1.3.6.1.2.1.43.11.1.1.9.1.1
CE401A	Patrone Cyan 507A HP CE401A	20	3	5	100	1.3.6.1.2.1.43.11.1.1.9.1.2
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	Fuserkit HP 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 toner 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 quite 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 queries between 01:35 and 23:00. And the number of queries per day is dependent on that fact, as well as it is dependent on the query interval you have set in the scheduler.

Name of Routine	SNMP OID	Value
# SNMP OID	1.3.6.1.2.32.32.1.5.1	has the value
AND		flows
# SNMP OID		has the value
or # SNMP OID		has the value
then Read the Error Messages out of the MIB Tree	1.3.6.1.4.3.18.1.8.1	
But only if the ErrorMessage contains the Words:		You can specify Words or sentences, separated by % (Percent). Example: Jan%Tue Paper%Warning%
and DOES NOT contain the Words:		You can specify Words or sentences, separated by % (Percent). Example: Jan%Tue Paper%Warning%
Report Powered of or unreachable Printer?	<input checked="" type="checkbox"/>	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	Error 0 (zero) if you want to be notified immediately
Hours before an Error Message is sent:	72	Error 0 (zero) if you want to be notified immediately, if you Enter a non-zero Value, you must also Enter a Number higher than 1 for the Minimum Number of Error Example: If you Enter 10 for the Minimum Number of Errors and 24 for the Hours before an Error is sent, the Notification will be sent if there are 10 or more Errors within the last 24 Hours

Save Back

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.

Export

The Filters below allow you to find the Printers you wanna export in the Database. The matching Printers will be listed and can be exported to an Excel File.

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
Filter Devices with Location
Filter Account Number
Filter Email Address of Printer Owner
Filter Devices in Group 1
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 0
Filter Devices with SNMP Write-Community Name 0
Export 1st install date in PSM <input type="checkbox"/>

Start Query Back to the Main Menu

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 mailservers
- 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	Toner Service Alert Part: CE400A - Patrone Schwarz 507AHP CE400A	Delayed delivery by PSM mailer: 2015-04-05 - 21:00	stephan.schiegg@sysprint.ch steve@ism.ch	Details
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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 suppressed.

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.

Manage Scheduled Tasks			
Description	Value	Last run:	
Query Interval in Minutes	15	10-11-2014 15:05	Values between 5 Minutes and 300 Minutes (5 Hours) are possible.
Minimal Network Traffic	<input checked="" type="checkbox"/>		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 ms (20-5000)		
Number of simultaneous processes (1 - 8)	1		If higher than 1, PSM will divide 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)	14:00		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).
Interval of Email sending in Hours	24	07-11-2014 14:00	
Only Orders for one Printer for each Email	<input type="checkbox"/>		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 LOWtoner 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.

Manage Scheduled Tasks			
Description	Value	Last run:	
Query Interval in Minutes	15	10-11-2014 15:05	Values between 5 Minutes and 300 Minutes (5 Hours) are possible.
Minimal Network Traffic	<input checked="" type="checkbox"/>		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 ms (20-5000)		
Number of simultaneous processes (1 - 8)	1		If higher than 1, PSM will divide 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)	14:00		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).
Interval of Email sending in Hours	24	07-11-2014 14:00	
Only Orders for one Printer for each Email	<input type="checkbox"/>		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 LOWtoner status as xx %	10 % (1-30)		This affect the consumable status view sorting order only.

Enhancement: Database checks

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 MySQL 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.

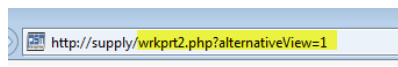


PSM Software Version 6.17 - 26th of August 2014

[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:



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 - 5th 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 Status Report

Consumables history and orders

Part Number	Consumable Description	Threshold Value (N) for Orders	Part below Threshold? for Orders	Order event Date	Remaining Capacity	Remaining Capacity (%)	Maximum Capacity	Manual order
CF325X	Fabrice Schwarz 25X HP CF325X	20	N		100	100 %	100	
C2H67A	Wartungsset HP 110V-C2H67A, 220V-C2H67A	20	N		100	100 %	100	
C1P70A	Vorfahrenzugset HP C1P70A	20	N		100	100 %	100	
P None	Walzen reinigen HP None	20	N		100	100 %	100	
CB091A	Heftler 1 HP CB091A	20	N		OK	NA	unknown	

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.

Last successful Query: 21-07-2014 / 10:33
 Overall Printer History
 Reboot printer

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.

Consumables ordered so far

Part Number	Consumable Description	Quantity	Last Inventory	Date of last refreshment	Part Count of last refreshment	Average number of refreshments	Consumable history
CE400A	Fabrice Schwarz 507A HP CE400A	1	NA	27-06-2013 / 15:20:01	0	0 %	
CE400A	Fabrice Schwarz 507A HP CE400A	1	NA	NA	NA	0 %	
CE400A	Fabrice Schwarz 507A HP CE400A	2	NA	NA	NA	0 %	
CE400A	Fabrice Schwarz 507A HP CE400A	1	NA	NA	NA	0 %	
CE300A	Fabrice Schwarz 110V-CE300A, 220V-CE300A	2	NA	NA	NA	0 %	

Consumables history

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:

Consumable Status Report

Consumables history and orders

Part Number	Consumable Description	Threshold Value (N) for Orders	Part below Threshold? for Orders	Order event Date	Remaining Capacity	Remaining Capacity (%)	Maximum Capacity	Manual order
CF325X	Fabrice Schwarz 25X HP CF325X	20	N		100	100 %	100	
C2H67A	Wartungsset HP 110V-C2H67A, 220V-C2H67A	20	N		100	100 %	100	
C1P70A	Vorfahrenzugset HP C1P70A	20	N		100	100 %	100	
P None	Walzen reinigen HP None	20	N		100	100 %	100	
CB091A	Heftler 1 HP CB091A	20	N		OK	NA	unknown	



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 - 25th 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 queried 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 of 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 query is no longer needed, and it is generating approximately 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 queried 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 cyan 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.

- %l 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")
- %n for the consumable part number
- %d for the consumable part description

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.

The screenshot shows the 'Manage Printers' interface. It includes filter fields for 'Group 1 Filter', 'Group 2 Filter', 'Toner Service Group', and 'Consumables Supplier'. There is a 'Generic Free Search Filter' and a 'Show Toner Levels' checkbox. Below these are checkboxes for 'Show Printers with Warnings first', 'Show only Printers not reachable today', and 'Show Inactive Stock/Spare Printers'. A table displays printer information with columns: IP Address / Host Name, Printer Name, Asset, Contact Person, Location, Serial Number, Printer Model, Page Counter, and Last successful Query. The first row shows: 192.168.200.141, prt141, Demorraum, VNBVDCV1WW, hp laserjet flow mfp m525, 3, 24-04-2013 / 18:40, 100%. Navigation icons and a 'Number of Lines per Page' dropdown are also visible.

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"



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
 - ; is the separator for the search and replace group
 - 2nd replacement: -3 will be searched, and if found, it will be replaced by 4

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
- %p printer name
- %s printer serial number
- %a asset number
- %c printer contact person
- %l 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.

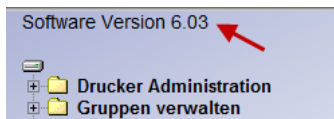
Verify that the update has been performed !

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.



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:

<u>Windows Group</u>	<u>Access Rights</u>
➤ psmusers	read only access, no specific rights
➤ psmprinteradmin	=psmusers + write access to create / change / delete printers
➤ psmprofileadmin	=psmusers + write access to create / change / delete printer profiles
➤ psmerroradmin	=psmusers + write access to create / change / delete error routines
➤ psmcounteradmin	=psmusers + write access to create / change / delete counter profiles
➤ psmgroupadmin	=psmusers + write access to create / change / delete groups
➤ psmlogistics	=psmusers + write access to the logistic menu (if feature present and configured)
➤ psmsuperusers	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 Authentication (optional)		
	Permanent Settings	Remarks
Activated	<input checked="" type="checkbox"/>	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	<input type="checkbox"/>	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,domain.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 psmprofileadmin	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:	
100011	16-02-2013	FRT062.SYSPRINT.LOCAL	Order sent by email	stew@sysprint.ch	Details
100016	16-02-2013	192.168.200.53.FRT058.SYSPRINT.LOCAL	Order sent by email	stew@sysprint.ch	Details
100009	17-02-2013	FRT062.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 5.40 - 19th of December 2012

Enhancement: "Show unreachable Printers" changed

Using this feature within the Consumables or Printer View only showed devices, were already reached once. The query has been enhanced to also show printers which have never been reached at all since they were defined in PSM.

Enhancement: Auto / manual Imports / Printer Queries / Printer Exports

Situation:

There is a number of customers who do not define or add printers within PSM directly; They add or remove it by importing csv files, with data generated by a central database (CMDB for example). This means, they are importing everything from there: Printer host name, printer model, contact, location, group assignments and so on. They have defined their import like in the following example:

Automatic Import of a CSV File from an FTP Server every Night

FTP / Windows Import active	<input checked="" type="checkbox"/>	Save and Test
FTP Server or Windows Server Share	/sysprint-internal	Save
Windows Domain (if Windows share is used)	SYSPRINT	
SSL Encryption	<input type="checkbox"/>	
FTP Port Number (default=21)	21	
User Name	steve	
Password		
FTP Directory (e.g. /home/user)	/daten/steve/smbtest	
Email Notification to the following Address(es):	steve@sysprint.ch	
Optional: Use the following Template		
Resolve IP Hostnames by Reverse DNS query	<input type="checkbox"/>	
Ignore Printer Model from CSV and detect Real Printer Model	<input type="checkbox"/>	USE ONLY IF YOU ARE SURE!!
Delete existing Printers who are not in Import File	<input type="checkbox"/>	USE ONLY IF YOU ARE SURE!!

The data from such databases are only as good as they are properly maintained and updated. For example, if a wrong printer model is in the database, PSM will also have the wrong model defined, resulting in wrong toner orders. Since the AutoImport runs over night, and since it is never sure that all printers can be reached to check the model, and since often the model names in the database often is not written exactly the same way, there is no way to safely check, if the database is correct.

In order to make life a little easier, we have implemented the following in PSM:

- If Auto-Import is enabled exactly as in the above example, the normal toner level query process will also query the model and serial number directly from the printer. Chances are much bigger, that over a view days the printer can be contacted and queried.
- The printer export has been enhanced. If you do an export from PSM and open the resulting excel file, the dummy field, which until now only had the ip address in it, also contains printer model and serial number. The complete format is: Printer Model - Serial Number - IP Address - Date when last reached. You can now easily compare this data with the data in the Printer Model/Profile and Serial Number columns to see if there is an inconsistency. Example:

E	F	X	Y
Printer Model / Profile	Serialnumber	SNMP Write Community	Dummy - do not delete
hp LaserJet 4250	CNH-0P87704		hp LaserJet 4250 - CNH-0P87704 - 192.168.200.51 - 19-12-2012
hp LaserJet 4250	CNH-0P83392		hp LaserJet 4250 - CNH-0P83392 - 192.168.200.52 - 19-12-2012
hp color LaserJet 9500 MFP	JPVFF07893		hp color LaserJet 9500 MFP - JPVFF07893 - 192.168.200.53 - 19-12-2012

If you find entries which are wrong, you can correct them in your master database (CMDB) and they will be corrected automatically during the next Auto-Import inside PSM as well.



Bug fix: "Pages between 2 Orders" now also work for "Toner has been replaced"

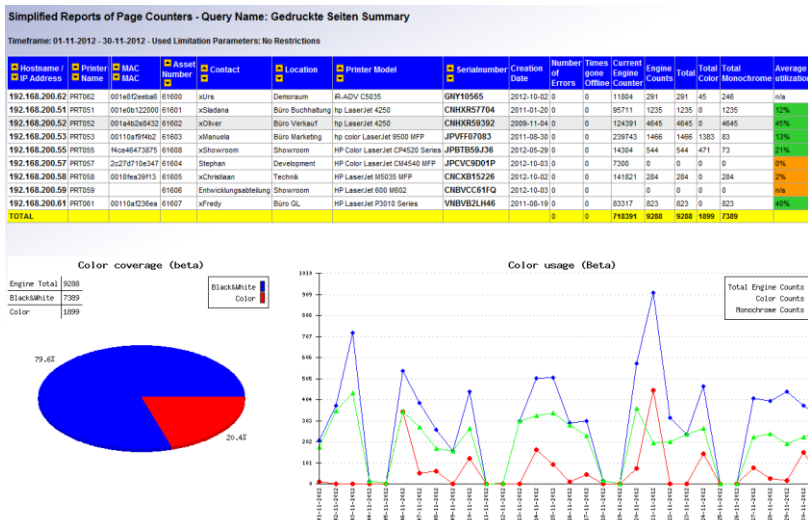
Until now, "the Pages between 2 Orders" value, which can be specified in each printer profile, was there only to prevent double orders. Still there are a lot of printers out, which, after saying "im almost empty", or "i only have 5% left" they come up with "i have a full toner" or "i have 100% toner" even if they are almost empty. (This most often happens, when the cover is opened, or a paper jam occurs, or when coming out of sleep mode.)

Long time ago, we have implemented "pages printed between 2 orders" to make PSM prevent a new order from being triggered for the next X pages.

OPTIONAL: Pages Printed between 2 Orders

We did not use this feature for the internal "Toner has been replaced" which was intended for logging only. But we forgot one thing: The report type 3 (consumables, detailed, "by parts replaced") will use these log entries to calculate the amount of toner replaced. Since we did not prevent multiple "toner has been replaced" messages for the same toner in the log, the consumable report will be wrong and contains too many toners. This has been corrected, the "pages between 2 orders" value will now also prevent multiple "toner has been replaced" in the log.

Upcoming Feature (implemented as a Beta Version): Graphical Report



The PSM Report Type 1 now contains 2 graphs, containing color coverage and usage. Depending on the timeframe for which the report is specified, the data for the usage shows each day, or each month. (up to 90 days: by day, more than 90 days: by month)

Please Note the following:

- The graphic is shown only in the Web Page. It is NOT possible to have that graphic in the excel / csv file!
- This feature has been implemented in labor conditions, no field test have been made yet. So it could be, that there is a bug and the resulting graphic is not correct. Anyway: We appreciate feedback from the field!
- The graphic will not be shown at all, if the Linux version of your PSM does not support graphic. (php5-gd is needed for this, this is not included in old PSM VM/Hardware appliances). If you don't see any graphic when you run a report type 1 you can be sure, that your PSM Version does not support it. For sure it will work on the latest PSM VMWare appliance images downloadable over http://partner.sysprint.ch/n_forum.



PSM Software Version 5.39 - 1th of November 2012

Enhancement: Export of Main Counters (SMB only)

Besides orders and alerts, also counters can now be exported, if automatic backup has been setup to a Windows SMB destination.

Automatic Backup / Datatransfer to an external FTP or Windows Server

Description	Value	
Activate Backup	<input checked="" type="checkbox"/>	Backup / Counterdata will be generated at 11:30 pm
Windows Share Name	<input type="text" value="//sysprint-vmsrv/daten"/>	eg 192.168.200.29 or //servername/sharename
Path on the Server/Share (eg. /MyDirectory/)	<input type="text" value="/daten/steve/smbtest"/>	
Username	<input type="text" value="steve"/>	
Password	<input type="password"/>	
FTP only options :		
SSL Encryption	<input type="checkbox"/>	
FTP Port Number (default=21)	<input type="text" value="21"/>	
Windows only options :		
Windows Domain Name	<input type="text" value="SYSPRINT"/>	
Export orders?	<input checked="" type="checkbox"/> Path: //sysprint-vmsrv/daten/daten/steve/smbtest/orders	
Export Toner Service Alerts?	<input checked="" type="checkbox"/> Path: //sysprint-vmsrv/daten/daten/steve/smbtest/toneralerts	
Export Errormessages?	<input checked="" type="checkbox"/> Path: //sysprint-vmsrv/daten/daten/steve/smbtest/errors	
Export Page Counters?	<input checked="" type="checkbox"/> TOTAL column: 1 COLOR column: 2 Path: //sysprint-vmsrv/daten/daten/steve/smbtest/counters	Warning: Check that the selected columns match the counter profiles!

Bug Fix: Memory Limit increased for statistic

The statistics program was setup to consume up to a maximum of 50MB. In large installations, this has turned out to be not enough, and caused the program to crash. The Memory limit has been increased to allow up to 150MB, to prevent crashes.



PSM Software Version 5.37 - 14 of August 2012

Enhancement: Canon Model detection

The printer model was always reported together with the firmware version. This caused PSM to auto-create more than one printer profile, when the model was the same but the firmware was different. This behavior has been changed. The Canon printer model will be read from a canon private MIB, which will only return the device model.

Enhancement: Automatic Backups (SMB): Backups older than 7 days will now be deleted

In version 5.35 we included the possibility to export tickets, import printers, and auto-backup over a Windows SMB share. Users complained, that the backup files generated each night fill up space. Starting with version 5.37 we now delete backup files older than 7 days from the share.

Bug Fix: HP CP2025

In all firmware levels including the current one, HP by mistake reports the device status as "other" regardless wherever the device is in sleep, idle or printing mode. This caused PSM to never detect the toner status. A workaround has been implemented to overcome the wrong behavior for this printer model.



PSM Software Version 5.36 - 29 of May 2012

Enhancement: Export of orders, error messages and toner service alerts

Note: The following is only possible, if the SMB (Windows) method is configured for automatic backup!

If you are using a windows shared folder for the automatic backup, you can additionally (and optionally) choose to also export the order-, toner service alert-, and error message ticket files. The files will be stored as plain text (.txt) files. If activated, PSM will create subdirectories below the directory path specified for the backups.

- For Orders: /orders Filename: order-*ordernumber*-*assetnumber*-*dd-mm-yyyy*.txt
- For Toner Alerts: /toneralerts Filename: tonerticket-*ticketnumber*-*assetnumber*-*dd-mm-yyyy*.txt
- For Error Messages: /errors Filename: errorticket-*ticketnumber*-*assetnumber*-*dd-mm-yyyy*.txt

Notes:

If you are using this feature for order files, make sure that you specify "only one order per printer" in the scheduler section. If the affected printer does not have an asset number specified, "none" will be used for the assetnumber.

Description	Value	
Activate automatic Backup after midnight	<input checked="" type="checkbox"/>	
FTP Server or Windows share	<input type="text" value="/sysprint-vmsrv/daten"/>	eg 192.168.200.20 or //servername/sharename
SSL Encryption	<input type="checkbox"/>	Parameter valid for FTP only
Windows Domain Name	<input type="text" value="SYSPRINT"/>	eg YOURDOMAIN, valid for Windows only
FTP Port Number (default=21)	<input type="text" value="21"/>	Parameter valid for FTP only
User	<input type="text" value="steve"/>	
Password	<input type="password"/>	
Directory path	<input type="text" value="/daten/steve/smbtest"/>	
Export Orders?	<input checked="" type="checkbox"/>	If checked, orders will be exported to: /daten/steve/smbtest/orders
Export Toner Service Alerts?	<input checked="" type="checkbox"/>	If checked, toner service alerts will be exported to: /daten/steve/smbtest/toneralerts
Export Error Messages?	<input checked="" type="checkbox"/>	If checked, printer error messages will be exported to: /daten/steve/smbtest/errors

Bug Fix: SNMP Timeouts set too low in Version 5.35

In Version 5.35 some of the snmp queries used in the PSM programming where using a very low timeout value. This can cause some problems:

- New printers cannot be added, because the timeout was too low to allow them to answer in larger networks
- Consumable queries did not always complete

In Version 5.36 we corrected those timeout values and stepped back to what we were using prior to Version 5.35.



PSM Software Version 5.35 - 14th of May 2012

Enhancement: added ability to get printer lists / store backups on windows share

PSM Ubuntu 12.04 (see next page) based VMWare images do have the smbclient installed. On such images the automatic backup and automatic printer list import menus have been enhanced, to allow, to specify a windows shared folder location instead of ftp only.

Example for the automatic backup:

Description	Value	
Activate automatic Backup after midnight	<input checked="" type="checkbox"/>	
FTP Server or Windows share	<input type="text" value="//myserver/myshare"/>	eg 192.168.200.29 or //servername/sharename
SSL Encryption	<input type="checkbox"/>	Parameter valid for FTP only
Windows Domain Name	<input type="text" value="mydomain"/>	eg: YOURDOMAIN, valid for Windows only
FTP Port Number (default=21)	<input type="text" value="21"/>	Parameter valid for FTP only
User	<input type="text" value="myuser"/>	
Password	<input type="password" value="*****"/>	
Directory path	<input type="text" value="/data/backups"/>	

Example for the automatic import of printers:

Automatic Import of a CSV File from an FTP Server every Night		
FTP / Windows Import active	<input type="checkbox"/>	<input type="button" value="Save and Test"/>
FTP Server or Windows Server Share	<input type="text" value="//myserver/myshare"/>	<input type="button" value="Save"/>
Windows Domain (if Windows share is used)	<input type="text" value="MYDOMAIN"/>	
SSL Encryption	<input type="checkbox"/>	
FTP Port Number (default=21)	<input type="text" value="21"/>	
User Name	<input type="text" value="myuser"/>	
Password	<input type="password" value="*****"/>	
FTP Directory (e.g. /home/user/)	<input type="text" value="/date/imports"/>	
Email Notification to the following Address(es):	<input type="text" value="yourimportManager@yourcompany.com"/>	
Optional: Use the following Template	<input type="text"/>	
Resolve IP Hostnames by Reverse DNS query	<input checked="" type="checkbox"/>	
Ignore Printer Model from CSV and detect Real Printer Model	<input type="checkbox"/>	USE ONLY IF YOU ARE SURE!
Delete existing Printers who are not in Import File	<input type="checkbox"/>	USE ONLY IF YOU ARE SURE!

Please note: If you are using automatic imports, the filename of the import file MUST be "printerimport.csv" !

Enhancement: automatic periodic reports

Until now, only weekly, monthly or yearly reports were possible. Now you will have an additional possibility to also have reports over a 2,3,4,6,12 month period with selectable starting month. Example for a quarterly report:

Automatic weekly Query	<input type="checkbox"/>	
Automatic monthly Query	<input type="checkbox"/>	
Automatic yearly Query	<input type="checkbox"/>	
Automatic Customized Report	<input checked="" type="checkbox"/>	>> Run every 3 months, starting month: Jan

Bug Fix: Excel export of consumable list did not show columns J and higher in percent

The export of the consumable view did show remaining levels instead of remaining percent for columns J and above. This has been corrected.

Bug Fix: Automatic import - supplier group was not auto-generated

If the import file did contain supplier groups, they were not autogenerated during the import. This has been corrected.



PSM ready for Ubuntu 12.04 LTS

New VMWare images have been built using the latest Ubuntu 12.04LTS. These new images will be supported until April 2017. There are 6 images available for download at http://partner.sysprint.ch/n_forum :

- 64 Bit ova (virtual appliance) image
- 64 Bit ova (virtual appliance) image with pre-installed VM-Tools
- 32 Bit ova (virtual appliance) image
- 32 Bit ova (virtual appliance) image with pre-installed VM-Tools
- 64- and 32 Bit zipped flat file structure

All 64 Bit images have a 80GB (growing) disk image, while all 32 Bit images contain a 15GB (growing) image. The future PSM-Lite hardware appliance will be based on the 32 Bit VMWare image, while the future PSM-Rack appliance will be based on the 64 Bit VMWare image. Using the same "base" for all types of PSM makes it a lot easier to support and maintain them in the future.

Upgrade existing VMWare installations:

It is not possible to upgrade existing installations, but you can use the following procedure to switch to the latest Version:

- Upgrade your existing PSM VMWare to Version 5.35
- Over the Administration Menu, perform a backup and store it on a save location
- Download the latest VMWare Image from http://partner.sysprint.ch/n_forum and install the virtual machine
- Re-install the license file
- Over the Administration Menu, perform a restore, and load the backup made previously. Important: DO NOT reboot now
- In the Administration > Network Setup Menu, save the Network configuration (even if it appears to be correct). This will take up to two minutes.
- Reboot your new VM

Upgrade existing PSM Rack appliances:

Updating an existing Rack Appliance is not possible. We will continue to support them "as is" until the end of the maintenance period. We are offering to exchange existing Rack-Appliances:

- "Bring in" or "send ahead": If you send / bring us back your old appliance, you can get a new one. We can also send you the new appliance in advance, if you return the old one within 3 Weeks. The price will be CHF 980 excl. VAT, plus shipping cost.
- For customers located in Switzerland, you can also request an onsite exchange. The price will be CHF 1'500 excl. VAT.
- For both of the above options, please notify us at least 3 Weeks, before the exchange should take place.

Upgrade existing PSM Lite appliances (yellow boxes only):

If you would like to upgrade your PSM Lite, the procedure is the following:

- Note the license number, which can be viewed over the Administration > License Menu
- Mail us the backup image together with your postal address and license number and a screenshot of your network configuration (Menu Administration > Network Setuo)
- We will prepare a new CF Card and send it by post
- when you receive it, first upgrade your existing PSM to Version 5.35
- Make a backup over the Administration Menu
- Shutdown, then wait for one minute before removing the power cord
- Remove the old CF Card from PSM Lite, and plug in the new one.
- Connect the power cord and wait 2 minutes before connecting
- Over the Administration Menu, restore the backup file
- Over the Administration Menu, load your license file
- Reboot

The cost will be CHF 50.-- plus shipping.



PSM Software Version 5.33 - 9th of January 2012

[Bug Fix: PSM becomes unresponsive when switching to https](#)

On some PSM Appliances PSM could become unresponsive when switching to https mode. This has been corrected. If you want to use https, please make sure that you have Version 5.33 or higher installed first.

[Bug Fix: Missing STARTTLS for TLS Emails](#)

If you tried to use tls:mailserver:port to send secure emails, the emails were still sent unsecure. This was due to a bug in the mailer program and has been corrected.

[Bug Fix: "headers already sent" message when changing / updating a printer configuration](#)

On some non-hp printers, the above message could appear when you save/update the a printer configuration. This was a cosmetic bug only and has been corrected.

PSM Software Version 5.32 - 23rd of December 2011

[Bug Fix: Email Password not saved correctly in Version 5.31](#)

If you are using authentication for Email, and you are changing the email password, the password will not be saved correctly, due to a bug in the encryption. This only occurs, if you have Version 5.31 AND if you have changed the email password while running Version 5.31.

If you have Version 5.31 installed, we recommend to upgrade to Version 5.32 immediately and to test your email setup after upgrade. If you receive an error, please re-type your email password again, save it, and test again.

We apologize for this error.



PSM Software Version 5.31 - 12th of December 2011

BEVORE you upgrade..

Version 5.31 contains many security related updates. It is not possible to install an earlier version once this upgrade has been installed. We highly recommend to do a backup BEFORE you upgrade to this Version to ensure that you have the possibility to go back.

Regular update: Password encryption in Database Tables

Since one of the new features (possibility to allow remote MySQL access) could allow non admin users to read passwords out of the database, all passwords will be encrypted during the upgrade.

Enhancement: TLS and variable Port Number for Email Setup

TLS (Transport Layer Security) support has been added to PSM. TLS is the successor of SSL for Email Communication and is comparable to SSL Version 3.1.

Another problem for users using an external mail server such as bluewin or sunrise has been covered in this enhancement. Some providers do no longer allow the standard mail Port 25 to be used (even if this is a violation of IEEE standards). They claim they want to prevent spam. PSM takes the facts into account and allows the Email Port to be selected.

To make use of the above described enhancements, you have the following choices:

- Port 25, without TLS: Just leave everything as it is. Only specify the mail server IP address or hostname
- Port 25, WITH TLS: Enter tls: in front of the mail server IP address or hostname
- Special Port without TLS: Enter :xx after the mail server IP address or hostname (xx = port nbr.)
- Special Port WITH TLS: Enter tls: in front and :xx after the mail server IP address or hostname (xx = port nbr.)

Example:

Email Server `tls:yourmailserver.yourdomain.com 25` >> **Note:** After saving new settings, please TEST your settings !

Enhancement: Remote Access Settings

PSM Hard- and Software Images based on Ubuntu 9.10 are more restrictive when it comes to remote access. They don't have ssh or webmin for linux direct access.

Since we know that the requirements are different, we made it more flexible, to allow you to grant or deny access to what you want.

For the above mentioned Images, you will find an additional button on the "Network Configuration" Screen, called "Access Configuration".

Access configuration allows you to configure the following options:

- Remote **SSH access** can be enabled temporary (will be disabled on next reboot)
- The **Web Browser Access mode** can be switched from default http to https or both http and https
- Remote **MySQL Database Access** can be enabled and users / remote host for MySQL can be configured

Interface: 00:0c:29:9d:be:da	Permanent Settings	Current Settings
Default IP Address	dhcp	192.168.200.228
Subnet Mask	dhcp	255.255.255.0
Default IP Gateway/Router	dhcp	192.168.200.11

Domain Name Configuration		
Host Name for this Device	psmvm	
Local Domain Name	sysprint.local	
IP Address of DNS Server 1	192.168.200.15	
IP Address of DNS Server 2	192.168.200.21	<input type="button" value="Save and Apply"/>

Date and Time		
Time Server	swisstime.ee.ethz.ch	
Date (DD-MM-YYYY)	08-12-2011	
Time (HH:MM)	21:44	<input type="button" value="Save and Apply"/>

System Services / Access		
Current Browser Access Mode	http and https	<input type="button" value="Enable https only"/> <input type="button" value="Enable http only"/>
Current SSH Remote Access Status	SSH Status: "sshd" is running	<input type="button" value="Disable SSH"/>
Current MySQL Remote Database Access Status	MySQL Remote access is enabled	<input type="button" value="Disable MySQL Access"/>

MySQL Remote User Management		
MySQL User / Password	MySQL Remote Host	Action
test	192.168.200.15	<input type="button" value="Add User"/> <input type="button" value="Delete User"/>



Enhancement: Active Directory (LDAP) Capabilities

PSM Hard- and Software Images based on Ubuntu 9.04 and later have been enhanced with LDAP capabilities. You can check after the upgrade to 5.31 if your Version is LDAP capable. If you see the following enhancements in the network setup screen, your Version is LDAP capable.

Network Configuration		
Interface: 00:	Permanent Settings	Current Settings
Default IP Address	192.168.200.199	
Subnet Mask	255.255.255.0	
Default IP Gateway/Router	192.168.200.11	
Domain Name Configuration		
Host Name for this Device	psmille	
Local Domain Name	sysprint.local	
IP Address of DNS Server 1	192.168.200.21	
IP Address of DNS Server 2	192.168.200.22	<input type="button" value="Save and Apply"/>
Date and Time		
Time Server		
Date (DD-MM-YYYY)	28-11-2011	
Time (HH:MM)	22:31	<input type="button" value="Save and Apply"/>
<input type="button" value="Back"/> <input type="button" value="Reboot"/> <input type="button" value="Shutdown"/>		

If you see "LDAP Authentication" below the usual Network Setup Screen, your PSM Version is capable of using LDAP Authentication.

If you want to use LDAP (active Directory) Authentication, you need to specify the Domain Logon Server, Port, and you need to specify a User Account with read access on the directory. Also you need to specify the base DN and the domain (User) suffix.

In Order to successfully activate LDAP Authentication, you need to also specify a test user and password. PSM will allow you to enable / activate LDAP Authentication only, if the test was successful.

LDAP Authentication (optional)		
Permanent Settings	Remarks	
Activated	<input checked="" type="checkbox"/>	<small>If checked, LDAP Access has been tested and verified</small>
LDAP Servername or IP Address	sysprint-vmsrv.sysprint.local	<small>usually the Domain Controller Hostname</small>
LDAP Server Port	389	<small>usually 389</small>
SSL	<input checked="" type="checkbox"/>	<small>use SSL Encryption</small>
Service User	steve	<small>Service User with the right to query the LDAP Server</small>
Service User Password (already set)		<small>Leave empty if already set</small>
Base DN	CN=users,DC=sysprint,DC=local	<small>Base DN, eg. CN=users,dc=mydomain,dc=local</small>
User Suffix	@sysprint.local	<small>Suffix for the Userid (eg. @mydomain.local). If not entered, the Users need to enter the full login eg. myuser@mydomain.local</small>
Enter Userid to test the LDAP Access		<small>In order to activate LDAP Access you need to enter a Userid and Password to test the LDAP Query</small>
Password		<input type="button" value="Test and Save"/>

Notes:

- LDAP Authentication has been tested with Windows active Directory (AD) only. We cannot guarantee if other LDAP Systems will work as well.
- The User "admin" is always excluded from this authentication Method.
- A Mixed Mode is possible. If LDAP Authentication is enabled, and the authentication is not successful for a specific user account, PSM tries to authenticate the user locally

LDAP / Active Directory Requirements for User Accounts

In order to allow a non-local user account to be authenticated, the User Account must be in one of the following windows groups (means, that you also have to create groups). The user can also be in more than one group.

Windows Group

- psmusers
- psmprinteradmin
- psmprofileadmin
- psmerroradmin
- psmcounteradmin
- psmgroupadmin
- psmlogistics
- psmsuperusers

Access Rights

- 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 the logistic menu (if feature present and configured)
- write access to all psm admin functions except network setup and restore

What if you want to restrict access to certain groups only, for non-superusers?

If you want to restrict access to non superuser accounts to certain groups only, you will still need to add the user account locally inside PSM. In this case, PSM will authenticate and assign the user rights using LDAP, and add the restrictions defined locally to the user.

Mixed Mode

If you already have local users, they will still continue to work. If PSM cannot authenticate the User over LDAP, it will try it locally. Care should be taken: this means that the "old" local password AND the LDAP password will work.



Enhancement: Double Toner Service Alert prevention

If you are using PSM for Toner Alerts (i.e. NOT for consumable orders) the value for "pages between 2 orders" will be used to prevent double alerts, which could occur if you have outdated firmware on HP Printers. Please note that this enhancement only works, if the threshold of ordering in the printer profile has been set to 0 (zero).

Bug Fix: Line break in "location" field caused cell merge on exported excel printer list

If there was a line break in the location field of a printer, PSM inserted a
 (new line) in the html formatted export xls files. This can cause excel to split the cell in two or more parts. You will only recognize that, if you use filters. PSM will now replace the
 with a hyphen (-) to prevent cell splitting.



PSM Software Version 5.29 – 26th of August 2011

Regular Updates: Serial Number detection for HP Futuresmart Devices

HP Future Smart Device Serial Numbers will be now Queried using their private MIB instead of public MIB. This is to avoid Situations, where the Formatter Serial Number is reported instead of the Device Serial Numbers (seen on some Firmware Levels on the CM4540).

Enhancement: Remaining Levels of 0 or 100% will no longer be ignored for HP Printers

Ignoring 0% and 100% was made because some HP Devices report these Levels when queried during wake up from the sleep mode, to avoid double orders. We have now implemented another method for this Situation, and will still ignore the Printer when it is in that status, but 0% and 100% is no longer ignored.

Enhancement: Extended Error Information, when Order Emails cannot be sent

When the Mail Server was not available at the Time when PSM Sends Orders, there was an Error Message written in the Log, saying what happened. This Error Message has now been enhanced with the Order Number, Mailserver, From and To Address to allow the Error to be tracked better, and to see which Order(s) have been affected.

Enhancement: Consumable Status View: Number of Lines per Page

The Number of Lines per Page can now be chosen. This setting will be stored in the User Profile.

Bug Fix: Serial Number change from Series Mutation was not possible

The Serial Number Field was locked on Series Mutation Screens. This Field is now unlocked.

Bug Fix: User Filter no longer overwritten

There was a bug which caused Filter Settings in the Consumable and Printer View to be stored for all Users instead of the active User only. This has been fixed.

PSM Software Version 5.28 – 30th of May 2011

Enhancement: MAC addresses displayed on types 1-3

MAC addresses will be read out from the devices during the normal printer query and stored into the database. They will be shown in the reporting section for report type 1-3.



PSM Software Version 5.27 - 27th of April 2011

Change: unreachable printers listed in auto-import log

Printers not reachable during an automatic import are now listed in the input log.

Bug Fix: only white screen on manual reports

When a manual report was executed, only a white screen appeared. This was due to a bug in the licensing system, and has been corrected.

PSM Software Version 5.26 - 20th of April 2011

License Control Scheme changed

The license control scheme has been enhanced. No further action, but a reboot is required after upgrading to this Version.

Enhancement: Separate Email Subject possible for different supplier groups

In the group administration > supplier groups, you can now specify different email subjects for each supplier group entry. This can be useful if the same supplier receives orders for devices under contract and devices without contract. You can group the contract devices in one supplier group, and the non contract devices in another supplier group and use the same email address but a different subject to have the orders clearly separated or to use an outlook rule to route the incoming mails to a separate folder.

If not specified, PSM will continue to use the default subject as specified in the "Program Administration" > "Email" setup.

Enhancement: Secure FTP for Backup

You can now choose wherever you want to use secure- or standard FTP for the automatic backup.

Enhancement: Import and automatic import of printers changed, printer model can be ignored

Reason for this change: Most customers who were using the import feature created their import files based on an active directory extract. More and more customers are now installing their print queues with Universal Printer Drivers. If two totally different printer models (let's say for example: a monochrome and a color printer) are both using the Universal Driver, PSM would always use the printer model "Universal Driver", which of course would lead into wrong orders.

To overcome this problem, you can now choose to force PSM, to ignore the printer model in the import file. In this case PSM always queries the printer IP to detect the real printer model. If a profile for the model does not exist, PSM will auto-create it.

Important: Printers already in the database will not be changed, as long as the serial number does not change. This means that this Feature only affects new printers, and printers where PSM detects a changed serial number.

Enhancement: Formulas in Counter Profiles possible on every line

Up till now it was only possible to calculate counters for counter lines already detected. For example if you had a color counter on line 3 and a total counter at line 1, it was not possible to use a formula on line to calculate the b/w pages in the form =1;-;3 because on line 2 PSM did not know the value from line 3.

PSM is now processing the lines with printer MIB's first, and after that it processes lines with formulas. This allows you use formulas on the line you want.



Enhancement: Suppression of Printer Error Messages

Some customers want to see inside PSM if there is a printer error. They also want to be able to create reports containing the printer errors, but, they don't need / don't want to be alerted. Up till now this was only possible by specifying a "dummy" email address.

New: You can now specify "logonly" as email recipient. If PSM detects "logonly", it will suppress email sending.

Enhancement: Parallel processing of automatic printer queries (max 8 simultaneous Tasks)

On large installations (1'000 and more printers) the query task takes long to complete. For example aprox. 30 Minutes for 3'000 Printers. This is no Problem, as long as you use PSM just for ordering. A 2 hour query interval would be sufficient. However, if you use PSM's "Toner Change" or "Error Message" Features, 30 Minutes delay or more can be too late for alerting.

PSM now allows parallel processing. This means you can decide to split the queries of your printers in up to 8 Tasks. Example: Your database contains 2'451 printers and you want to split them in 8 Tasks. This means, that PSM starts 8 separate tasks at the same time. Task 1 will query printer 1-306, Task 2 will query printer 307-613 and so on.

Parallel Processing can be configured in the "Program Administration" > "Manage Scheduler" Section. It will work only if you have more than 200 Printers.

Please note, that using this feature will increase the Network load!



PSM Software Version 5.24 - 8th of December 2010

Bug Fix: mySQL Error when a Printer Error Message is too long

If a Printer Error Message contained over 250 Characters, PSM was not able to handle it. This handling has been changed: If the Message is longer than 250 Characters, PSM will cut it down to the first 250 Characters, before inserting it into the mySQL Table. This does NOT affect the Email Alert: The Alert sent by Email will still contain the full message, and the File attachment available in the Error Log will also still contain the full message text.

Bug Fix: PSM Restore Problem, when restoring to a different PSM Edition

Some PSM GUI's are slightly different on the VMWare, PSM Lite and PSM Rack Appliance Versions. PSM Lite and the latest PSM VMWare Image for example do not use Webmin for the Setup of Network Parameters. To know which GUI to use PSM has a Key stored in a Table. This key was accidentally overwritten, if a Backup from one Edition was restored to another (eg. PSM Rack Appliance > PSM VMWare). This can cause the Network Setup GUI to disappear. PSM Restore has been changed, it now keeps the current Edition in Memory during the Restore.

Bug Fix: Text Length of Error Messages

In cases when the Error Message contained more than 250 Characters, PSM was not able to handle the Message. Message Field extended to support longer messages.

Bug Fix: Email Server address cannot be stored

When "localhost" was used previously, a dedicated Server Address could not be stored, did always display "192.168.200.21". The handling has been corrected.

PSM Software Version 5.23 - 25 of October 2010

Support for Sharp Copy / MFP Machines

- Auto-Creation of Sharp Printer Profiles has been implemented.
- Counter Profile Logic for Sharp has been implemented. Sample Profiles for Sharp will be available by the End of the Year on our Support Forum.

Enhancement: Auto-Creation of Profiles for Color Printers

Some Printers, such as Sharp, Lexmark and others have their MIB's Reported in the Order CMYK. If you wanted to see the Toners in the correct column in PSM's Consumable view, the Order of the Toners in the Profile had to be changed manually to KCMY. From now on, PSM will change the Order itself to KCMY if it detects a CMYK Order during Profile Auto-generation.

(KCMY = Black, Cyan, Magenta, Yellow).



PSM Software Version 5.22 - 2nd of September 2010

Enhancement: Internal Copy of Orders

If you enter one or more email addresses on particular Printers to send the recipients copies of orders of error messages, they will receive it also if "1 email Order per Printer" is selected in the Scheduler Setup.

Enhancement: DHCP

For the PSM Lite or Rack Appliance Version 5 (the 1" height Rack Appliance) it is now possible to choose DHCP for the Addressing. This is done by entering the string "dhcp" in the IP Address Field.

Change: Reporting Section - Report Type 1 and 2

It has been noted, that in some unexplainable cases, HP Page Counters can sometimes count backward a view Pages during the month if only used little. We cannot explain that behavior, however it does happen. We have implemented a protection to allow the end count for a time period to be as much as 30 pages lower than the start count. This is to avoid that PSM thinks, that the printer has been changed and calculate from zero.

Change: Consumable Status View

The consumable view is more and more used by people responsible for managing the supplies. They have wished that the Sort Order shows by default devices with less consumable left, first. We have taken that into account and changed the sort order on the consumable page. During each query PSM will note the lowest percentage left for each printer. This DB entry is used by the consumable status view to sort the printers. Devices with less consumable are shown first, regardless of their ordering or error state. Consequently you are forced to use the normal printer view, if you want to see devices with errors first.

Please note that Printers not capable of reporting the percentage left, will be treated the following way:

- OK	=	100%
- Unknown	=	50%
- LOW	=	10%
- EMPTY	=	0%

Change: Error Tickets will be kept only 7 Days

To prevent unnecessary waste of Disk Space, the Error Ticket Files will be stored only for the last 7 Days. This does not affect the Database Entry of the Error Ticket, only the copy of the Email which was sent.

Bug-Fix: Automatic Backup

In some cases the automatic Backup did not run or was incomplete. This can happen if one of the DB Tables used by PSM is still open or in use (for example if anybody is still logged in). The Backup Program has been changed to not use "lock tables" while doing the backup. This will allow the Backup to run in any case.

Bug-Fix: Automatic Import

If PSM did detect serial number change for a device during the import, because of a new Printer has been installed, but the model in the import file is still the old one, PSM did no longer allow a model change in subsequent imports, because it already had changed the serial number, and thinks it is the same device. This has been changed. A model change within the Import File will now in any case delete the existing Entry from the Database and add the new one.



PSM Software Version 5.21 - 1st of June 2010

Bug-Fix: Automatic Backup

PSM contained an Error in the automatic Backup Routine which could result in filling up the Harddisk by containing the whole File System instead of just the PSM Folder. This is due to different implementation of the tar (compression) Program within the different Linux Distributions.

Affected Users / PSM Versions:

PSM Lite: - Not affected
PSM VMWare: - PSM Version 5 (Ubuntu) Image published March 2010 (only if automatic Backup is active)
- PSM SuSE (64 Bit Images) (only if automatic Backup is active)
PSM Rack Appliance: - ALL PSM Rack Appliance Versions (only if automatic Backup is active)

If you belong to the "affected Users" we recommend immediate update of PSM. The Update will cleanup the Harddisk and will prevent future wrong behavior.

Note: If you see a "mysql connect" failure on the Login Page, this means, that the Harddisk is full already. In this case, please log on over the Console and issue the following commands:

```
rm /*.tar  
rm /srv/www/htdocs/*.tar
```

This should cleanup enough Disk Space in order to be able to get PSM to work again and to install the update.



PSM Software Version 5.20 - 26th of May 2010

Enhancement: Enhancement: Part Ordering upon Error Message further enhanced

This Feature has been introduced already in Version 4.14 (contained in this Release Note). It describes the possibility to Trigger Part Ordering upon a Printer Error Message.

Depending on the Manufacturer and the Language Selected on the Printer, it happens, that the Message contains National Characters, such as öäüèèèÖÄÜ. Even more worse: Some use their own encoding Scheme for such Strings, not only UTF8 encoding. This makes it impossible to Filter such a Message. In this case the only chance to Filter the correct Message will be Hexadecimal. If you have a Printer, who has a Message on the Display which you want to use to trigger a Consumable Order, but normal Text Filtering does not work, you can do the following:

- Use the MIB Browser available in the Administration Section of PSM
- Enter the IP Address of the Device and Scan on MIB Tree 1.3.6.1.2.1.43.18.1.1.8.1
- PSM will display for example the following Result:

.1.3.6.1.2.1.43.18.1.1.8.1.1	Fixierstation erneuern
.1.3.6.1.2.1.43.18.1.1.8.1.3	42 C3 9C 45 20 65 72 6E 65 75 65 72 6E

In the above Example this Lexmark C782 Printer would Display on the Printers Frontpanel: "Fixierstation erneuern" and "BÜE erneuern". (In English: It needs a new Fuser and a new ITU Unit).

Since the "Fixierstation erneuern" is displayed in clear Text, you will be able to use this Filter:

```
ERROR%1.3.6.1.2.1.43.18.1.1.8.1%Fixierstation erneuern
```

Since the Message for the ITU Unit (BÜE erneuern) is reported in Hex only, you can use this Filter:

```
ERROR%1.3.6.1.2.1.43.18.1.1.8.1%42 C3 9C 45 20 65 72 6E 65 75 65 72 6E
```

The Important thing in the Example above is, that you need to put an "x" in Front of the HEX Search String.

If you know, that some Printers are configured in English, and some in German, you would need to use 2 Filters:

```
ERROR%1.3.6.1.2.1.43.18.1.1.8.1%42 C3 9C 45 20 65 72 6E 65 75 65 72 6E%Replace ITU
```

PSM allows you to set up to 4 Filter Strings per Consumable. The Total String Length has been extended to 24 Characters.

PSM Software Version 5.19 - 25th of May 2010

Bug Fix: "Automatic Level Detection for newer Lexmark Printers" has been cancelled

It turned out that the behavior is Firmware dependent. This is unusable in practice.

Therefore we were forced to cancel that enhancement, since it causes more failures than advantages.

Some of the Lexmark Printers (even if new) do not Report the Fuser and Belt correctly.

For example a C782 with new Firmware reports the Parts correctly, while with older Firmware the Result is that the Device always reports -3 until the Part is completely empty/used.

We can unfortunately only recommend to remove these Parts from the Profile.



PSM Software Version 5.18 - 17th of May 2010

Enhancement: "Low Network Load" Mode

By default PSM queries all Devices as fast as possible, one device after the other. The amount of SNMP Queries is dependent on the following Criteria:

- Scheduler: the Interval of the Queries
- Per Device:
 - How many consumables are defined in the Printer Profile assigned to the Device
 - How many of these consumables are defined for automatic max Capacity detection
 - If - and how many Error Profiles are assigned to the Device
 - If a Page Counter Profile is assigned to the Device:
 - How many Counters are defined in the Counter Profile

Worst Case Scenario: If a Device has 15 Consumable Parts in the Printer Profile defined for automatic Capacity Query, 2 Error Profiles, and a Counter Profile with 15 Counters (often seen on color MFP Devices). This would result in a Total of approx. 50 SNMP Queries. Assuming you have 600 Devices, this would give a Total of 30'000 Sessions every 30 Minutes. In a fast Network, PSM would need approx 5 Minutes to execute and Process 30'000 Queries. If such a Query has to pass a Firewall, it could rate this as a DoS Attack.

To prevent this, we have introduced the "Low Network Load" Mode. This Mode does the following:

- Page Counter Queries (all except the Main Counter) are executed only twice a Day:
 - First Time when the Device is "first Time seen today"
 - Second Time on the last query of the Day (between 9pm and 11pm)
 - This ensures, that we are still able to gather Counter Information for each Day, but it prevents unnecessary Queries. With this, up to 15 queries are eliminated during the Day for each Device and on each query.
- Automatic Capacity Query will only be done once a Day, when the Device is "first Time seen today". With this another up to 15 Queries are eliminated during the Day for each Device
- Each SNMP Query will have at least 100 Milliseconds delay to a previous Query. This ensures, that there will never be more than 10 Sessions/Queries per Second.

Based on the Example above, the Session would be reduced to 12'000 and the Time needed to Query 600 Devices will be extended to 20 Minutes. So the difference is quite significant: Instead of 30'000 Sessions in 5 Minutes, you will have only 12'000 Sessions in 20 Minutes. Traffic is reduced by 60% !

Note: If you use the "Low Network Load" Mode, make sure, that the Query interval is set high enough to allow completion of one full query before another one starts. Based on the above example, you would need to set the Query Interval to at least 20 Minutes or higher. Otherwise one Query would not be completed before the next one starts.

If do not use PSM for Ordering only (i.e no Error Reporting or Toner Service Alerts), we recommend to set the Interval to 120 Minutes, since querying every 2 Hours for the Consumable Status is normally enough.

Enhancement: Automatic Level Detection for new Lexmark Printers

If you are using Lexmark Devices manufactured 2009 and later we recommend to set the Maximum Capacity to 0 in the Printer Profile. This ensures correct detection of the remaining Capacity especially for Non-Toner Parts such as the Fuser. In Version 5.18 we have implemented the "auto" detection for Lexmark Printers.

This means: Please use the Value "0" for "Maximum Capacity". This applies to Toners as well as to Fusers / Belts.

Cancelled in Version 5.19! It turned out that the behavior is Firmware dependent. This is unusable in practice.



PSM Software Version 5.16 - 23th of April 2010

Enhancement: Consumable View

The Consumable View has been changed. The View is now as wide as the Browser Window. Also the Number of Devices has been limited to 15, in order to speed up the view. Instead of needing to Scroll, you can now use the Icons at the Top left, to see the next 15 Devices, or directly Jump to the End of the List. Example: **1 - 15 (Total: 732) << >>**

Additionally the view will show Printers with Warnings first by default, since this is the most wanted choice when using this View.

Enhancement: PSM Reports - Report Type 3 enhanced

The Report 3 has been further Enhanced. You can now choose, if you want to see the Number of Consumables Replaced instead of Consumables Ordered. Some Customers don't use PSM for Ordering, but for Alerting, when a Consumable is near Empty. Without this Selection, they would not see the amount of Consumables used.

You can switch on the Number of Consumables replaced, by selecting "Qty replaced instead of Qty Ordered" in the Report definition. Example:

	Value
Query Name	average Toner Exchange
Results by Email to: (eg. adm@xx.ch, user@xx.ch)	
IP Address / Host Name	*
Only Devices within the following Names (Generic with * allowed)	
Only the following Serial Number	
Error Message(s) (generic with *)	
Automatic weekly Query	<input type="checkbox"/>
Automatic monthly Query	<input type="checkbox"/>
Automatic yearly Query	<input type="checkbox"/>
Timeframe (Date from TT-MM-JJJJ to TT-MM-JJJJ)	01-01-2006 - 31-12-2030
Query Type	3 - Consumables by Device, Detailed
Only Devices with Printer Model	
Report Type 1/2: Calculate Pages starting from 0	
Report Type 3: Qty replaced instead of Qty Ordered	<input checked="" type="checkbox"/>
Only Devices within the following Group 1	Black and White Office Printer Color MFP

Bug Fix: All PSM Reports in the Reporting Section missed one Day of Data

Due to a Programming mistake, all Report Types did not include the first Day of the Reporting Period. This affected the automatic as well as the manual Reports. PSM writes all Information of the past day at Midnight, before a new Day starts. The Reporting Section used the Date entered, and therefore missed the first Day.

The Programming mistake has been corrected. We apologize for any inconvenience this might have caused.

Bug Fix: Lexmark T630

The T630 Models of Lexmark don't report according to the Rules. An exception has been Programmed inside PSM to allow automatic Orders for this Model. In Order to activate the Exception behavior, please Enter "-5" for the Maximum Capacity Field in the Printer Profile for the Lexmark T630.



PSM Software Version 5.15 - 8th of April 2010

Enhancement: Support for new PSM Rack Appliance

Build 5.14 has been made to support the Network Configuration on the new 1HE Rack Appliance.

Enhancement: PSM Stock Administration - manual Orders

This Feature is for those only who are using the PSM "Stock Administration" Feature. Manual Stock bookings are now possible.

Enhancement: PSM Reports - Report Type 3 enhanced with average Replacement Levels

The detailed Consumable Report has been enhanced. It now shows not only the amount of Consumables ordered for each Devices, but also the average Percentage of the Toner Replacement. Each Device shows a column as displayed below for each consumable Part:

Q7551X	
Black Cartridge HP Q7551X	→ Description and Part Number
Qty	→ Quantity Ordered within Report Period
Avg Rpl	→ Avg Rpl means "Average Replaced"
0	→ n/a means that for this Printer the Part has not been replaced within the Report Period
0	→ Zero % means the Part has been replaced when it was completely empty
3	→ Here the Part was replaced at 1.79% Average
1	→ Here the Part was replaced at 3.50% Average
4	→ This is the overall average Percentage for all Printers in this Table

Enhancement: limited Support for Printers not capable of Reporting any Toner Levels

This Feature has been made upon a Customer Request. It allows to manually add Printers not capable of reporting anything else than the Page Counter. It requires that the Maximum Capacity for all Parts have been manually specified. The Calculation starts at the Time when the Printer has been queried for the very first Time. The Threshold Levels and Remaining Pages are calculated based on the Page Counter.

PSM will use this calculation model, if you specify CALC for the Printer MIB:

Part Number	Consumable Description	Threshold Value (%) (for Orders)	Threshold Value (%) (Tonerservice)	Maximum Capacity	Printer MIB to retrieve the remaining Pages
X1234	Toner	20	0	10000	CALC

Please Note: We do NOT recommend to use this Feature, since there is no way to be sure, that the calculation will be correct. The amount of Toner needed varies based on the Coverage, and since this model does not query anything about the Printer Usage, the Risk of early or late Toner Orders is High.

Bug Fix: Negative Values in Counter Reports (Type 1 and 2)

If a Report has been made for a Period of Time before new Printers have been added to PSM, the Counter Report has shown negative Values for the Printer added later than the end of the Report Period. This has been corrected.



Bug Fix: Device Model/Profile Filter did not work in Error Reports (Type 5)

When a Printer Profile has been selected as a Filter for the Error Reports, PSM did still show all Devices. This has been corrected; PSM will now correctly use the Filter.

Bug Fix: Toner Service Alerts had one wrong Description

Within Toner Service Alerts, PSM showed "Remaining Capacity(%)" instead of just "Remaining Capacity" . This has been corrected.

Bug Fix: Query Device routine crashed when the specified Printer Model did not match the real one

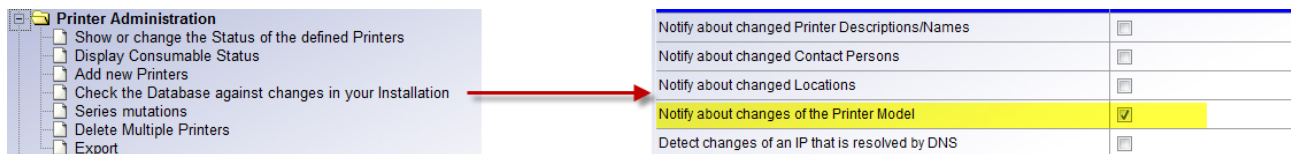
This only happened with OKI Printers. When a NON-OKI Printer was configured inside PSM, but the real Printer was an OKI, the Query Routine crashed as soon as it should have queried the faulty Device. The Rest of the Printer was no longer queried.

An additional Check has been implemented in PSM, to avoid a Crash in such a Situation.

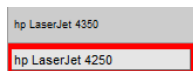
Hint:

We recommend to run "Check the Database against changes in your Installation" regularly !

If you select "Notify about changes of the Printer Model", PSM will verify all Devices in the Database with the Devices found in the Network.



All Entries where the Printer Model and/or Serial Number does not match will be displayed . Devices, who are found to be different, will be shown in a Table.



The Upper Value is the one in the PSM Database. The Lower Value with the Red Border is the Real Value detected.



PSM Software Version 5.13 - 11th of January 2010

Warning: Serious Bug in Version 5.10/5.11 – Please do not use!

Enhancement: Handling for older Lexmark Printers

Old Lexmark Printers such as the T630/640 do not use Standard MIB behavior. PSM has a special Routine to handle this. To use the special Routine, set the "Maximum Capacity" to -2 for the Toners.

Enhancement: Alert Status can be cleared

The Alert Status of specific Parts can be cleared, if needed. Normally there is no need to do that. However it will be Helpful in the following Circumstances:

- If you change the Threshold Levels to a lower Value, but the Consumable already alerted
- If you Swap around Consumables, and accidentally cause a wrong Order/Alert
- If you have false Alerts caused by Version 5.10/5.11

Bug-Fix: Wrong Alerts / Orders when using the "Auto" Feature of Version 5.10/5.11

If the "Auto" Feature described in Version 5.10 was used to detect the Maximum Capacity, and the Printer was busy, wrong Orders or Toner Service Alerts could have been made. Especially if you use the Toner Service Feature, you will have repeated wrong Alerts. This only happened with HP / Lexmark Printers.

PSM Software Version 5.11 - 29th of December 2009

Enhancement: Column Selection in Consumable Status View

You can now select wherever or not you want to have the following Columns displayed in the Consumable Status View:

- Asset Number
- Contact Person
- Location

Bug-Fix: "Stock" Printers Displayed in Consumable Status View, even if not selected

When "Show Printers with Warnings first" has been selected in the Consumable Status View, Stock (Lager) Printers were displayed as well. This is now suppressed.

Bug-Fix: "Automatic Monthly Report" could not be selected

If there was no Date Set in the Report Definition, PSM did not store the Automatic Report Selection. This has been corrected. Automatic monthly Reports can now be setup without entering a Date.

Bug-Fix: "/" in Report Name: Report did never run

If your Report Name did consist the "/" Character, PSM has allowed to store the Report Definition, but the Report did never execute. This has been corrected. "/" is now treated as an illegal Character. If you enter a "/" it will be changed to "-".



PSM Software Version 5.10 - 28th of December 2009

Enhancement: Automatic Maximum Capacity Calculation

Up to Version 5.07, PSM was calculating the Remaining Percentages of Consumables upon the Maximum Capacity set in the Printer Profile in relation to the queried remaining Capacity. This often leads to Problems, when Toners with different Capacities are used. (I.e. Starter Toners).

You have now the possibility to let PSM calculate the remaining Percentages Printer by Printer. If you fill in 0 (Zero) for the Maximum Capacity, PSM will query each Printer individually and therefore calculate the Remaining Capacity correctly.

This is especially useful for small Printers, such as the HP CP1515.

Please note, that this only works for Printers who are using the Standard MIB's for Consumables.

(E.g. HP, Lexmark, Kyocera, Canon, or in General all Printers who are using OIDs beginning with .1.3.6.1.2.1.43.11.1.1.9 for the remaining Pages)

Below there is an example.

Consumable Configuration : hp LaserJet 4200

Threshold Levels for Orders: If you Enter a value of Zero, the affected Part will be excluded from the Ordering Process.
Threshold Levels for Toner Service: If you leave the Field Empty or Enter a 0, the affected Part will be excluded from the Notification.
Printer Profile last checked at: 16-12-2009

Part Number	Consumable Description	Threshold Value (%) (for Orders)	Threshold Value (%) (Tonerservice)	Maximum Capacity	Print
Q1338A	Druckpatrone Schwarz HP Q1338A	20	5	0	.1.3.6.1.2.1.43.11.1.1.9
Q2430A	Wartungskit HP 110V-Q2429A, 220V-Q2430A	20	5	0	.1.3.6.1.2.1.43.11.1.1.9

Change: Handling for Misbehavior of Certain HP Printers

Sometimes HP Printers are reporting 0 (Zero) for the Remaining Levels of all Parts in the Device. This has been seen especially on HP CM3530 and CM6040 Printers. PSM will now ignore Zero for HP Printers, as long as HP Provides a Fix for that defect in the Firmware, to avoid wrong/double Orders.

Performance Improvements

Consumable Parts which are not controlled by PSM (Threshold 0) were still being Queried by PSM, even if disabled for Ordering and Toner Service. PSM now completely ignores such Parts and will no longer Query such Consumable Levels.

On sites that have lot of Devices in PSM for Asset Reasons only, or for querying Page Counters or Errors without ordering only, this will cause a huge Performance increase.

Bug Fix: Auto-Import

There was an Error inside the Auto-Import Routine, which have caused Devices with a changed IP Address to be deleted and re-added on the next Day. This has been fixed.



PSM Software Version 5.07 – 30th of November 2009

Change: Night Batch Processing and Printer Query Timeouts changed

It has been detected, that the Night Processing of the Page Counters sometimes takes longer than expected. This can cause incomplete Weekly Reports. Also the Timeout for the Printer Query has been increased slightly to make sure, all Printers are covered by the Printer Query. Night Processing starts at 11:40 pm and Ends 01:20 am. Normal Operation resumes at 01:35 am. New Timeout for Printer Query: 1 Second instead of 0.5 Seconds.

PSM Software Version 5.06 – 17th of November 2009

Enhancement: Support for OKI 6300

This Printer does not behave according to MIB Specifications regarding detection of Consumables. PSM has been enhanced with additional Routines to find and use this Printer Model using non-Standard Queries.

Bug-Fix: Query Orders – Filter by IP Address did not work

The IP Address Filter did not work when querying for Orders. This has been fixed.

Change: Automatic Printer Import Time changed

Up to Version 5.05 the Auto-Import (importing Devices from an FTP Server) was interfering with the Reporting Section, since both processes were running parallel. Depending on the amount of Devices this could have resulted in wrong Reports (usage Data). Only Users who used the Auto-Import Feature were affected. The Nightly Procedure has been changed to move the Auto-Import at the End of the Night Batch Process to make sure it will not interfere with the automatic Reports.

PSM Software Version 5.05 – 4th of November 2009

Enhancement: Series – Mutation enhanced

Up to now it was not possible to search for Printers with Empty Groups or Profiles, or to Set Empty Groups or profiles. This has been changed.

The default Search Filter for Groups and Profile is now -- (which means no Filtering). So if you want to search for devices with no Group assigned, you can change the Filter to the empty entry.

On the Result-Side you can now also select an empty entry, if you want to remove Devices from a Group or from a Profile.

Bug-Fix: Missing Order-Items when PSM Stock Administration Feature was used

When there was more than one Part to be ordered for the same Printer AND on the same Day, PSM did order only the last item for this Device. This has been fixed.



PSM Software Version 5.04 – 5th of October 2009

IMPORTANT – PLEASE READ FIRST!

Version 5.04 is a major Upgrade which could take longer than usual (depending on how many Printers are defined). If for example 800 Printers are defined, it could take 8 Minutes. **DO NOT INTERRUPT THE UPGRADE!**
(The Reason for the long upgrade Time is that we re-organize all Printer History Tables, to allow faster Report-Processing Times.)
Please Reboot PSM after the Upgrade, and close the Browser Window after you have initiated the Reboot.

It is recommended to make a Backup before you upgrade to this Release!

You need to have Version 3.36 or later to be able to use this Update. If you have an Older Release than 3.36, please install the latest available Version 4.xx first.

Announcement: New Licensing System

While Licensing Features was already done on the Administration Site, the Licenses were not controlled electronically within PSM. Until now you were able to use all PSM Features, even if not licensed. The only things controlled with the current License Files were:

- Company Name
- Number of Printers
- Expiration Date

This will change beginning 1th of January 2010.

All Licenses issued after the 1th of January 2010 require that you have PSM Version 5.04 or later installed!

Older License Files will still continue to work also with Version 5.04 or later.

The New License Files will control the following:

- Company Name
- Number of Printers
- Expiration Date
- Optional Features, such as:
 - o Toner Service Feature (2nd Threshold)
 - o Error Messages Feature
 - o Reporting Feature (Scheduled Page- and Usage Counter Reports)
 - o PSM Stock Administration Feature

With the new License Files you will see only the Menu's which are licensed. For Example if you do not have the "Error Message Feature" License, you will not see any Error Group or Error Profiles. Within Import/Export you will see the Menu's but you will not be able to change any Settings.

Please Update to Version 5.04 ASAP. Thank you.

Enhancement: Masking of IP Addresses

Because of Security Reasons, some Customers have asked to not Display the IP Addresses in all outgoing Communication. As we always respect Security issues, you can now choose to "Mask IP Addresses" in the Administration Section > "Email Setup, Admin Password and Language". If you choose to Mask the IP Addresses, the following Items will display XXXXXX instead of the IP Addresses:

- All Orders sent out by Email
- Old Type Statistic
- All Attachments generated over the Reporting Section



New Feature: PSM Stock Administration

Some Customers still have their own Local Stock of Consumables. They order manually at the Supplier when a specific Minimum Stock has been reached. PSM has now it's own Stock Administration to allow the Management of Consumable Parts using a Local Stock. Upon Installation of this PSM Version, PSM will automatically create a Database containing all Part Numbers present in all Printer Profiles. Therefore please make sure that you have the correct Part Numbers in the Printer Profiles if you want to use this Feature! If you add or change Printer Profiles, PSM will automatically add new Parts to the Database.

General Rules to use this Feature:

- The Feature must be Licensed (beginning with Version 5.0)
- At least one Supplier Group must be present and must have one of the following Strings in the "Supplier Email" Field (instead of Email Addresses):
 - o Lagerverwaltung
 - o Inventory
 - o Inventaire
- The Printers for which this Feature should be used, must have one of the Supplier Groups assigned, who is configured to use this Feature

Where to Start:

Only the Admin and Superuser is allowed to use this Feature. If you want to allow other Users to use this Feature, you have to add the Rights for the appropriate Users. This is done in the User Administration by the Admin or Superuser. Please Note that Users other than the Admin and Superusers are not allowed to change Minimum Holdings or Stock Quantities in the Stock Administration.

The screenshot shows a user configuration window. The 'PSM Inventory' checkbox is checked. Under 'Supplier Group Rights', the dropdown menu is set to 'ALL' for 'Gruppe 1', 'Gruppe 2', and 'Vor Ort Gruppe'.

To enable the Feature, go to the Group Administration > Supplier Groups and delete the Email Address(es) in the Field "Supplier Email". Just fill in the Value "Lagerverwaltung", "Inventory" or "Inventaire" depending on the Language.

Supplier Name	Email Recipient(s) for Orders
External Orders	steve@sysprint.ch
Internal Stock	Inventory

Please Note that from now on, Parts for Printers who have assigned this Supplier Group will no longer be ordered automatically!

Orders for these Printers will be visible in the PSM Stock Administration under "Customer Orders / Parts delivery to the Printers" (Warenausgang).

PSM will automatically insert all Parts Numbers and Descriptions from the Printer Profiles into the Stock Administration. First thing we recommend to do is to Enter the Current Quantities you have on Stock, and the minimum Holdings.

Part Number	Consumable Description	Printer Model	Current Stock	Minimum holding	Open Orders at Supplier	Open Orders from Customers	
Q3962A	Toner Gelb	HP Color LaserJet 2840	10	5	0	0	Change
Q3960A	Toner Schwarz	HP Color LaserJet 2840	0	0	0	0	Change
Q3963A	Toner Magenta	HP Color LaserJet 2840	0	0	0	0	Change



How it works:

On a daily base you should check if there are Printer Orders. You can print a Shipping List for each Order and mark the Part as shipped **. If you mark an Order as Shipped, the Part will be booked from the Stock.

Printer Order Number	Printer Orderdate	Shipping Date	IP Address / Host Name	Printer Name	Contact Person	Location	Serial Number	Printer Model	Part Number	Consumable Description	Print Shipping List	Mark as delivered
100003	05-10-2009	--	prt051.sysprint.local	PRT051	Urs Schuster	Test (42" sized)	CNCXF15886	hp laserjet 4350	Q5942X	Black Cartridge HP Q5942X		

If the Stock Quantity goes below the Minimum quantity, the Part will be marked Yellow in the Stock Administration, and there will be also a Warning on the PSM Main Screen, telling the Users that there are orders to make.

Part Number	Consumable Description	Printer Model	Current Stock	Minimum holding	Open Orders at Supplier	Open Orders from Customers	
Q5951A	Patrone Cyan HP Q5951A	HP Color LaserJet 4700	<input type="text" value="5"/>	<input type="text" value="10"/>	0	1	<input type="button" value="Change"/>

In the Order Proposal Menu all Parts who's Quantities are below the Minimum Holding are listed. If you generate an Order you will get a Summary, which you can Export in Excel Format. These Parts you should now Order manually at your Supplier.

Part Number	Consumable Description	Printer Model	Current Stock	Minimum holding	Open Orders at Supplier	Open Orders from Customers	Order Proposals
Q5951A	Patrone Cyan HP Q5951A	HP Color LaserJet 4700	5	10	0	1	<input type="text" value="6"/>
Q5942X	Black Cartridge HP Q5942X	hp LaserJet 4350	-1	0	0	1	<input type="text" value="2"/>

On the "Open Orders / Parts receipt" Screen, PSM will show all open Orders. If you receive a Shipment from your Supplier, you should immediately book the Parts you have received. As soon as the Ordered Quantity has been booked in, the Part will disappear from the Open Orders Screen.

Order Number	Order Date	Part Number	Consumable Description	Printer Model	Ordered	shipped so far	Open	Receipt Qty	
20090001	05-10-2009	Q5951A	Patrone Cyan HP Q5951A	HP Color LaserJet 4700	6	0	6	<input type="text" value="6"/>	<input type="button" value="Book"/>
20090001	05-10-2009	Q5942X	Black Cartridge HP Q5942X	hp LaserJet 4350	2	0	2	<input type="text" value="2"/>	<input type="button" value="Book"/>

** There is a Button on the Delivery Screen called "Shipping List Layout" for the Admin and Superuser. This Button calls the Menu where you can define the Layout of the Shipping List. It also allows to upload a Company Logo, to specify the Sender Postal Address and a Greeting. Please Note that you should Switch off Header and Footer Page in your Internet Explorer, and to specify the appropriate Margins. We recommend a Top Margin of 0mm, Left Margin 15mm, Right Margin 0mm and Bottom Margin 7mm



Enhancement: "Location" Field enhanced

The "Location" Field has been changed to a Text Field, to allow Line Breaks. In this Field you can write for example the whole Postal Address of a Printer. To insert a new Line, just press Enter. PSM will change this to html Format (
 = New Line). If you import Printer from a CSV File you would need to Enter the
 html Code, since New Line is not allowed in a CSV File. Also Exported CSV Files will contain the
 Code.

The Address formatting using html Codes will be used in the new PSM Stock Administration Feature and on all Printer Display Screens.

Note: In the Order, PSM will use the "Comma" Character since the Order Mail is Text only!

Enhancement: TOTAL Counters in Counter Profiles / Totals in simplified Reports

Many Users wanted to have a less detailed Report for the Page Counting but still be able to view the Total, Total Monochrome and Total Color. But:

Many Color Printers do not have a Black and White Total. This needs to be calculated for example from the Total Counter minus the Color Total. The other Problem is, that different Manufacturers, or even different Models from the same Manufacturers have other Counters. Therefore it was not possible to show an overall Total Mono / Color in one single Table.

To allow this, we have made 3 new Rows at the End of the Counter Profiles. On this 3 new Rows you can use to tell PSM, which from the first 15 Rows have to be taken to calculate the Totals.

Example for HP:

Original Total Pages Row 1
Original Total Color Row 2

Enter for the Last 3 Rows:

TOTAL =1
Total Color =2
Total Black =1;-:2

Change Counter Profile	
Description	Value
Profile Name	Hewlett-Packard
1 Total Printed Pages	.1.3.6.1.2.1.43.10.2.1.4.1.1
2 Total Pages in Color	.1.3.6.1.4.1.11.2.3.9.4.2.1.4.1.2.7.0
3 A4 Simplex Pages Monochrome	.1.3.6.1.4.1.11.2.3.9.4.2.1.1.16.1.1.1.26.0
4 A4 Simplex Pages Color	.1.3.6.1.4.1.11.2.3.9.4.2.1.1.16.3.1.1.26.0
5 A4 Duplex Pages Monochrome	.1.3.6.1.4.1.11.2.3.9.4.2.1.1.16.1.1.3.26.0
6 A4 Duplex Pages Color	.1.3.6.1.4.1.11.2.3.9.4.2.1.1.16.3.1.3.26.0
7 A3 Simplex Pages Monochrome	.1.3.6.1.4.1.11.2.3.9.4.2.1.1.16.1.1.1.27.0
8 A3 Simplex Pages Color	.1.3.6.1.4.1.11.2.3.9.4.2.1.1.16.3.1.1.27.0
9 A3 Duplex Pages Monochrome	.1.3.6.1.4.1.11.2.3.9.4.2.1.1.16.1.1.3.27.0
10 A3 Duplex Pages Color	.1.3.6.1.4.1.11.2.3.9.4.2.1.1.16.3.1.3.27.0
11 A5 Simplex Pages Monochrome	.1.3.6.1.4.1.11.2.3.9.4.2.1.1.16.1.1.1.25.0
12 A5 Simplex Pages Color	.1.3.6.1.4.1.11.2.3.9.4.2.1.1.16.3.1.1.25.0
13 A5 Duplex Pages Monochrome	.1.3.6.1.4.1.11.2.3.9.4.2.1.1.16.1.1.3.25.0
14 A5 Duplex Pages Color	.1.3.6.1.4.1.11.2.3.9.4.2.1.1.16.3.1.3.25.0
15 Copy Pages	.1.3.6.1.4.1.11.2.3.9.4.2.1.2.2.1.63.0
Description	Value
16 TOTAL	=1
17 Total Color	=2
18 Total Black	=1;-:2



Enhancement: Delimiter Character for CSV Files can be specified

While Switzerland is using the Semi-Column for CSV Files, other Countries are using the Comma. Until Version 4.27 the Semi-column was hardcoded inside PSM. Beginning with Version 4.28 you can define wherever you want to use Semi-Column or Comma. This can be done only with the Userid "Admin" in the Program Administration > "Email Setup, Password and Language".

Bug Fix: Import did not work

Due to an Error in the PSM Program Library the manual Import of Printers using a CSV File did not work correctly. This has been corrected (4.28)

Enhancement / Bug Fix: Wrong/Negative Numbers in Consumable Reports

If a Printer was newly added within the Report Query Time, the Consumables used could have shown wrong or negative Numbers. This has been corrected (5.03)

Enhancement / Bug Fix: Wrong/Negative Numbers in Counter Reports

If a repair has been performed on a Printer (eg. Change of a Formatter Board) and the technician forgot to Enter the previous Counters, the Report could have shown negative Numbers, when the Query Period was within the Time of the technical Intervention. This was because the Counter at the Start Date of the Query was higher than on the End Date. PSM does now take that into Consideration. If the Engine Counter from the End-Date is lower than the one on the Start Date, PSM assumes that a technical Intervention was made. It will find the Date of the Intervention, calculates the Counters, From Start-Date – Intervention and from Intervention Date – End Date.

Enhancement / Bug Fix: Auto-Import

If an Auto-Import contains Model-Names (exported for Example from an Active Directory Server) it can happen, that the same Printer is specified twice or more (for example one Time with PS and another Time with PCL6). If the two Entries in the File are not always in the same Order, PSM would assume, that the Model has changed, and deletes the existing Entry, and reopens it with the new one. This can cause a loss of the History Data. To avoid this, PSM will now compare the Serial Number captured from the Printer with the one already in the Database. If the IP Address <> Serial Number Combination is the same, PSM will ignore the Model from the Import File and it will leave the existing Printer intact. Only administrative Data such as Contact Person and Location will be updated.

Bug-Fix: Email Orders did not work with Version 4.28

With Version 4.28 there was an Error, when you configured to have one Email per Printer in the Scheduler. The Email was not sent, it was only logged. This is fixed since Version 5.02



PSM Software Version 4.xx and older Versions

Enhancements / Bug Fixes – Version 4.27

Bugfix: Auto-Import

If an IP Address or Hostname is present more than once, the Auto-Import could fail. This has been corrected.

Bugfix: Auto-FTP Backup

The FTP Mode has been changed to passive Mode, to allow Backup on Microsoft FTP Servers and to overcome Firewall issues.

Bugfix: Wrong “Part has been replaced” Messages

On some Xerox Printers the above Message was generated, when the Part has been disabled for Ordering (Threshold Value 0). PSM generated by Mistake a Message for each Query. This does no longer happen.



Enhancements / Bug Fixes – Version 4.26

Enhancement for Error Handling

PSM has been enhanced with a 3rd possibility to deal with Printer Errors. To decide in which Mode you want to use an Error Profile you have to know, what value to use in the following Field of the Error Profile.

Minimum Number of Errors before a Notification is sent:	<input type="text" value="0"/> ← 1	Enter 0 (zero) if you want to be notified immediately
Hours before an Error Message is sent:	<input type="text" value="0"/> ← 2	Enter 0 (zero) if you want to be notified immediately. If you Enter a non-Zero Value, you must also Enter a Number higher than 1 for the Minimum Number of Errors! Example: If you Enter 10 for the Minimum Number of Errors and 24 for the Hours, before an Error is Sent, the Notification will be sent if there are 10 or more Errors within the last 24 Hours.

Normal Operation

If you leave both Fields empty or 0, PSM will work in normal Operation Mode. This means, as soon as an Error has been detected, a notification will be sent.

“Number of Errors” Mode

If you fill in a Number higher than 1 in the first field (1), PSM will check on each Query, if there is an Error.

Example (assuming the Counter (1) is set to 3):

- Query 1: Error detected > Counter goes from 0 to 1
- Query 2: No Error detected > Counter resets to 0
- Query 3: Error detected > Counter goes from 0 to 1
- Query 4: Error detected > Counter goes from 1 to 2
- Query 5: Error detected > Error Alert will be sent.

New: “Number of Errors within Time” Mode

If you fill in a Number higher than 1 for Field (1) AND a Number higher than one for Field (2), PSM will check for the Number of Errors within the specified Time (in Hours). A Value between 2 and 999 can be used.

Example (assuming you set 3 for the Counter (1) and 24 for the Number of Hours (2)):

- 01.03.09 – 09'00 Error detected > Written to Log, device goes to red condition
- 01.03.09 – 09'10 Error still present > no action in Log
- 01.03.09 – 09'20 Error cleared > no action in Log, device goes to normal Condition
- 01.03.09 – 12'30 Error detected > Written to Log, device goes to red condition
- 01.03.09 – 12'40 Error cleared > no action in Log, device goes to normal Condition
- 01.03.09 – 16'00 Error detected > Written to Log, device goes to red condition
- 01.03.09 – 16'10 Error detected > Error Alert will be sent, containing all previous Errors
> On the Device, the Date of the Alert will be noted

Now the Device is locked for the next 24 Hours – no further Message will be sent, but they will still be logged.

...

- 02.03.09 – 16'20 PSM will check the Number of Errors within the last 24 Hours. If there are 3 or more Errors it will again send an Error Alert containing all Messages for the last 24 Hours. If the Number of Errors was less then 3, the Date of last Message sent will be deleted, and from now on, PSM will continue to check during each Query for the Number of Errors within the last 24 Hours.



Enhancement: New Counter-Profile for Ricoh Printers

Some Program changes have been implemented to allow using a new Profile called "RICOH_AUTO". This Profile (which can be downloaded from the PSM Online Forum and imported into PSM Counter Profiles. It can be assigned to any Nashuatec, Lanier and Ricoh Machines and will automatically recognize the Position of the Counters for most Devices. (Known Exceptions: Model 222 and a view OEM Machines).

Description	Value
Profile Name	RICOH_AUTO
Counter: Machine Total	AUTO_RICOH
Counter:Print:Total	AUTO_RICOH
Counter:Print:Full Color	AUTO_RICOH
Counter:Print:Black White	AUTO_RICOH
Counter:Print:Half Color	=3;-4;-5
Counter:Copy:Total	AUTO_RICOH
Counter:Copy:Full Color	AUTO_RICOH
Counter:Copy:Black White	AUTO_RICOH
Counter:Copy:Single Two-color	AUTO_RICOH
Counter:FAX:Total	AUTO_RICOH
Counter:FAX:Black White	AUTO_RICOH
Counter:Fax 2 Color	=11;-;12
Counter:Black and White Total	=5;+9;+;12
Counter:Color Total	=4;+6;+;8;+;10;+;13

A value of AUTO_RICOH means that the Counter Text is searched in the MIB, and the corresponding MIB Value will be auto-calculated.

DO NOT CHANGE THE TEXT!!
It is important that the Text is matching exactly the Text in the MIB. If it does not match, the corresponding cannot be retrieved.

Ricoh Devices (most of them) do not have a Total Color Counter. Therefore we use a Formula to calculate the Total Color Count. In this Example:

- = Column 4 (Counter:Print Full Color) ;
- + ; Column 6 (Counter:Print Half Color) ;
- + ; Column 8 (Counter:Copy:Full Color) ;
- + ; Column 10 (Counter:Copy:Single Two-color) ;
- + ; Column 13 (Counter:Fax 2 Color)

Bug Fix: Contact-Person / Location detection

Some Printers report the Contact Person and Location in HEX, if there are National Characters in the String. Also some Printers report a " at the beginning and the End of the String.

This results in a String like:

```
"35 2E 20 4F 47 20 47 61 6E 67 20 76 6F 72 20 42 FC 72 6F 20 42 4C 35
32 30 "
```

The detection Routine has been changed to strip out any " and correctly convert the ASCII-HEX Values into ASCII. The String above will now be correctly displayed as:

5. OG Gang vor Büro
BL520



Enhancements / Bug Fixes – Version 4.22 - 4.25

Enhancement for Consumable Status View

- For Each Printer you will have a Note Field available. This Field is only available in the Overview. It allows making a specific Note for each Printer.
- Notes for Consumables below threshold has been enhanced:
 - o The Field appears the same size as before. However you can enter up to 50 Characters now.
 - o If you move the mouse over the consumable Field, in addition to the Part Number and Part Description, also the whole Content of the Note made for the Consumable will be displayed.
- Consumable View can be exported to an Excel Sheet

Enhancement: Last 7 local Backups can be restored directly from PSM

The following applies only to VMWare Users, who have selected their Backups to reside inside PSM.

(eg: Host = localhost / Directory = /srv/www/htdocs/downloads). If localhost is chosen, PSM writes the Program and Database Backup directly to the given local Folder, where it can be saved by an external Application. PSM keeps the last 7 Backups in this case.

New: The last 7 Backups can be restored directly from the Backup / Restore Section.

Enhancement: Old Style Report Titles

In the old Style Reports an additional button has been added, to allow "Generic" Titles (Total, Mono, Color).

Note: This does not apply to the newer "Reports and Evaluations" Section.

Bug-Fix: Wrong "Part has been replaced" Messages with OKI Devices

There was an Error, which caused a "Part has been replaced" Message during each Query for some OKI Printers.

Bug-Fix: Log Overflow not detected

If the PSM Internal Log was filled up (for example by the OKI Messages mentioned above), PSM was not checking this Situation, and it could have happened, that the Log was filled up completely making PSM Slow or unresponsive.

Now PSM is checking the Log Size every Night, and will delete Old Entries, if the Log Database Size has reached 60MB.

Bug-Fix: Range Import not possible

Due to a Programming mistake, the Import of IP Ranges for the PSM Queries was no longer possible. This has been corrected.



Enhancements / Bug Fixes – Version 4.21

Enhancements in the Reporting Section

- The Group Filter has been changed. You can select now as many Group-Members as you wish
- You can now choose to have the Total Page Counters in the Report. Until now, only the Page Counts within a specific Time Period where possible. If you choose to have the Total Page Counters in the Report, every Counter will be calculated from Zero.
- Automatic Groups can now also be started manually
- It is now also possible for normal Users to create Reports. Users without superuser or admin rights will only see their own report. If a normal User tries to create an already existing Report Name, the Userid will be added automatically to the Name to avoid overwriting existing Reports. Reports for Normal Users will be restricted automatically to the Groups which they are allowed to use.

Enhancements in the LOG Section

- The Group Filter has been changed. You can select now as many Group-Members as you wish
- Normal Users are restricted to the Groups where they have Access Rights for the Error-Log Section. However they will always see the Order Logs for the Supplier Groups, where they have Access Rights, even if an Order contains Consumables for a Printer assigned to a Group, where they normally have no Rights. This is by design. Since one single Order can contain Orders for many Printers, there is no way to restrict that.

Special Printer IP-Hostnames “Lager_ and Stock_ have been extended

The Printer IP/Hostnames beginning with “Lager_” and “Stock_” were used to keep inactive Printers inside PSM but not Query them anymore (keep them as inactive Printers).

We have added the following IP/Hostnames for the same purpose:

- IP/Hostnames beginning with: entsorgt_
- IP/Hostnames beginning with: disposed_
- IP/Hostnames beginning with: éliminés_

Bug-Fix & Enhancements for restricted Users

- Group Admin Users always were able to see Error Logs from Restricted Groups. This has been corrected
- Restricted Users (other than Group Admin) did not have the Reporting Section. The Main Menu for restricted Users has been changed. The Reporting Section has been added.
- Group Admin User was not able to change his Password. This has been corrected.



Enhancement: AUTO_XEROX Feature

There are some Xerox Printers/MFPs around, which do not have the same SNMP OID's for the detailed Page Counters, even if the Devices have the same Model and Firmware. (Unbelievable, but true..)
In order to not have to manage several Counter Profiles for the same Models, we have added the "AUTO_XEROX" Feature. This Feature allows PSM to automatically find the correct OID for a given Counter Name.

The only thing you have to know is the correct Counter Name.

Here's an Example:

Profile Name	Xerox-6180MFD
Total Impressions	AUTO_XEROX
Black Printed Impressions	AUTO_XEROX
Color Printed Impressions	AUTO_XEROX
Color Impressions	AUTO_XEROX
Black Impressions	AUTO_XEROX
Faxed Impressions	AUTO_XEROX
Network Images Sent	AUTO_XEROX
Email Images Sent	AUTO_XEROX
Black Copied Impressions	AUTO_XEROX
Color Copied Impressions	AUTO_XEROX
Fax Images Sent	AUTO_XEROX
Faxed Impressions	AUTO_XEROX

Theoretically you can use a Profile like that for many different Xerox Devices. PSM will omit Counters, which are not present in a Device.



Enhancements / Bug Fixes – Version 4.20

Bug-Fix: Reports

Under some circumstances the PSM Night-Job could fail. One of the PSM Night-Job Tasks is, to read all Page Counters and write it to the Printer-Specific Tables. This Job has failed, when there are Printers with invalid Characters in the IP Address or IP Host Name. (such as 192.168.2^2 for example).

All subsequent Printer Tables were not updated, and the Log Files were no longer cleared.

Also the Printer Tables for Printers added after there was once a mistyped Entry, have no longer been created.

PSM 4.20 fixes this Problem and creates all missing Tables, if any.

However, missing Daily Detail-Counters are lost in any case.

Bug-Fix: Lexmark Non-Toner Parts shown always Low

Lexmark does not follow always the RFC Standards for Printing for SNMP Queries. We have implemented some Code to prevent Non-Toner Parts from being shown as "LOW". The Standard for Parts where a Printer has remaining Supply of a specific Consumable is either by Reporting the Remaining Capacity, or -3, and 0 or -2 when the Supply is empty or near empty.

Older Lexmark Printers will report it the wrong Way around: they tell -2 (unknown) when there is enough Toner, and -3 when the Toner is near Empty. We have already taken this into Account on Version 3 of PSM.

Enhancement: Kyocera Subroutines

Some Kyocera Printers cannot report the exact Remaining Capacity. Special Subroutines have been implemented to handle this behaviour.



Enhancements / Bug Fixes – Version 4.19

Enhancement: Special Handling for Xerox

Some Xerox Printers / MFP's do have the same Problem like some other Manufacturers: They are loosing the brain while waking up from Sleep Mode: They forget about the Consumable Levels, and report, that they have some or all consumables empty, even if it is not true. This leads into multiple Orders. A special Routine has been implemented, to deal with this Situation:

- If 0 is reported for Parts, who should have a positive Counter, they will be ignored.
- If -2 (unknown) is reported for Parts with a "OK / LOW" Counter (where only -3 and 0 is valid) they will be ignored.

Enhancement: Counters are reported in "one Order per Printer"

If PSM is setup to have a separate Email per Printer for the ordering Process, PSM will now also show the Detail-Counters in the Order, just below the "===== END OF ORDER =====" Tag.

Enhancement: Consumables view changed

The Consumable view is now made using some CSS Style sheet Code, which allows to keep the Header (Titles) always on the Top of the Page, also when you scroll down the Page. If this turns out to be more user Friendly we will also change the Printer View at a later Time.

Bug-Fix: Special Handling for Ricoh corrected

For Ricoh, there was already a special handling in Place, to prevent double Orders. However, when PSM was protecting from a double Order, the displayed Value was wrong: It displayed -100% instead of LOW.

Bug-Fix: Model Name also detected for RFG Printers

When PSM made a Profile for an RFG Printer, the Profile was only Named "RFG" instead of "RFG Model Name". This has been corrected.



Enhancements / Bug Fixes – Version 4.18

Enhancement: New Printer-Overview: “Display Consumable Status”

This new View can be reached over the Main Menu (Printer Administration). It is basically the same thing compared “Show or change the Status of the defined Printers”, but it has been enhanced, to display all Consumables in one view. Because of the amount of Columns to be displayed on this screen, the “Printer Name” Column has been removed, and a smaller Font has been used.

If you move your Mouse over one of the Percentage Cells, PSM will show you a small Popup with the Part Number and Part Description (Javascript must be enabled in your Browser to allow this). If one of the Parts is below threshold for Ordering, it will be marked yellow, if it is below Threshold for Exchange, it will be marked red. In addition to that, PSM will show a small Text Field just below the Percentage. This allows you to fill in for Example some remarks regarding shipment. PSM will clear the Field automatically, when the Part is no longer below Threshold.

Here is a sample Screenshot:

Address / Host Name	Contact Person	Location	Serial Number	Printer Model	Page Counter	Last successful Query	Consumable Status															
prt058.sysprint.local	Demo Firma	JPSNH17148	hp oolior laserjet 4730mp	908	05-12-2008 / 16:10	80%	96%	87%	69%	88.9%	98.4%	98.4%										
prt055.sysprint.local	Demo Firma	JPHNB02747	hp oolior laserjet 4700	44571	05-12-2008 / 16:10	78%	33%	79%	69.8%	89.1%												
prt053.sysprint.local	Demo Firma	JPVFF06854	hp oolior laserjet 9500 mfp	18133	05-12-2008 / 16:10	65%	91%	99%	13%	74%	68%	49%	88.3%	53.3%	76.6%							
prt052.sysprint.local	Demo Firma	CHFX013650	hp laserjet 4200	114558	05-12-2008 / 16:15	63%				99%												
192.168.200.61	Demo Firma	NLT0078432	hp laserjet 4050 series	98712	05-12-2008 / 16:10	84.3%																
192.168.200.57	Demo Firma	CNSV/F34291	hp laserjet 4345 mfp	12182	05-12-2008 / 13:10	79%				94.5%	94.3%											
192.168.200.61	Demo Firma	CNCFX15890	hp laserjet 4350	76709	05-12-2008 / 16:10	48%				99.2%												
192.168.200.249		CNCHD01235	hp oolior laserjet om3530 mfp. 2		13-11-2008 / 16:10	98.9%	100%	98.9%	100%	99.9%												
192.168.200.226	Demo Firma	JPGFD37402	hp oolior laserjet 4600	40281	27-10-2008 / 15:40	87%	47%	42%	45%	69%	98%											
192.168.200.202	Demo Firma	CNCHB14480	hp laserjet m5035 mfp	231	05-12-2008 / 16:10	99%				99.8%	99.7%											

Bug-Fix: Toner Service Alerts were sent to wrong recipients

If PSM detected within the same Query, a Toner Service Alert for more than one Printer, and the Printers were not in the same Alert Group, PSM did not clear the previous Email Alert Destination, and subsequently the Email Address used to alert the first Printer, was used for the second Printer, together with the correct Address for the Second Printer. For Example: If 5 Printers had to be alerted, the 5th Printer did alert to the first for Addresses as well. The Reason was a Variable, which was not correctly cleared after sending one Alert. This has been corrected.

Bug-Fix: RFG Serial Number and Model correctly detected

Ricoh OEM Products are not handled by the Ricoh Standard Routines, since the SNMP Values are different. Some Code changes have been made, to correctly deal with these Devices.

Bug-Fix: Incorrect DB Field Length for Printer Name, Contact and Location

While the Database Field in the Printer Table can contain up to 100 Characters, all temporary Tables used for Import and Mutations did only contain 50 Characters. This has been corrected to 100 Characters for all Tables.



Enhancements / Bug Fixes – Version 4.15

Counters combined for Ricoh Devices

Since all Ricoh based Devices do use the same Scheme for the Counters (same Columns), regardless if black/white or Color Devices, the Detail Report 2 in the Reporting Section will now put those Devices into the same Block in the Reports. This applies to all Devices with Counter Profile Ricoh* NRG* and RFG* .

Suppression of non existing Counters in the Reporting Section

If you have changed the Printer Model for a specific IP Address, for example from a Color to a Monochrome Device, the Reports did still show Color Counts, if it had a Start Date before the Model change. This is now suppressed. Only Counters for the currently used profile, who are configured with a MIB Address or Formula will be reported.

Vendor ID RFG added

Ricoh OEM Products (Samsung) will now be correctly detected. They are using another Toner detection and Counter Scheme compared to the other non-OEM Ricoh Products.

Column Width expanded for Printer Name, Location, Contact

Although the Database Field was allowing already up to 100 Characters to the above Fields, the Field length shown in the Serial Mutation, Add Printer, and modify Printer Sections did show only approximately 20 Characters (depending on the Text, because the Font is proportional). This Fields have been extended to show up to 40 Characters now.

Fix in the French Language File

Because of an illegal Character in the French Language Files, it was happening that PSM showed an Error Message like "headers already sent". This has been corrected.



PSM Software Version 4.14 – 16th of October 2008

Enhancements / Bug Fixes – Version 4.14

Enhancement: Automatic Reports > Error Messages Report

It is now possible, to have the Error Report sent automatically. The Results are the same, as if you would run it manually from the Log Section.

Enhancement: Part Ordering upon Error Message

Some Printer don't report all Parts using the Standart Mib. Especially special Parts like Staples, or Fuser Oil are not reported. It is now possible, to use the Error Message generated by the Printer, to trigger Part Ordering for this purpose.

Please be aware, that we cannot take any Warranty for this Feature to work properly, since it is not always sure, that the Error Message constantly appears, until the Part has been replaced. If it for example disappears, because there is a more serious Error, and re-appears, if the Error has been fixed, it could result in a double Order. Therefore it is important, that you set the Value for "Pages between Orders" high enough, to prevent double Orders. The Value for "Pages between Orders" should be set aprox 50% of the Capacity of the smallest Part.

Example: If you have Toner, which should make 10000 Pages, and all other Parts (Developer=50000 Pages for Example), then you should set the Value for "Pages between Orders" to 5000 .

Requirement: You need to know the Error Message or Error Code for the Part, which should be triggered for Ordering.

Description:

To use the Feature, insert a new Line in the Printer Profile.

- Enter the related Part Number
- Enter the Part Description
- use 20 / 5 / 100 as Threshold values and Maximum Capacity.
- in the Printer MIB Field Enter the following

```
ERROR%1.3.6.1.2.1.43.18.1.1.8.1%40440
```

```
|      | |      |      |      |      |
|      | |      |      |      |      | 4
|      | |      |      |      |      | 2
|      | |      |-----|      |      | 3
|      |-----|      |      |      | 2
|-----|      |      |      |      | 1
```

1 = ERROR (PSM knows that you are using the ERROR Feature)

2 = % used as separator

3 = The Printer MIB for the Error Message Display (Ricoh MIB used in this Example)

4 = Error Code Number, for which PSM will search in the Error Message Text. (Staples in the above Example)
(Could be up to 3 different Error Numbers, separated by %)

Example for detecting Fuser Oil Unit on a NRG DSc 332, detected by Error Number 40261, 30408 or 10074 :

```
ERROR%1.3.6.1.2.1.43.18.1.1.8.1%40261%30408%10074
```

Example for an un-detected Waste Toner bottle on a NRG DSc 332, detected by Error Number 10032:

```
ERROR%1.3.6.1.2.1.43.18.1.1.8.1%10032
```



Enhancements / Bug Fixes – Version 4.11

Enhancement: “Read only” limited User does now see Page Counters and Error Messages

The Printer detail Display has been changed to allow viewing of Page Counters and Error Messages also for limited Users.

Enhancement: Pre-Release of French Language Support

The PSM GUI Text can now be switched to French for the admin and for the users. Please Note, that in this Release the Help Text Screens are still in English.

Enhancement: Personal Email Messages can be switched of or selected

If there is an Email Address assigned directly to a Printer, the Recipient did always get a copy of the Orders and Error Messages. Now you can choose to send Order Copies only, Error Message Copies only, or none. Please Note that this is a PSM Internal Selection only. You can only set the selection using the Printer Detail Screen or the Series Mutation.

Enhancement: Auto-Import / Serial Number detection

When the Auto-Import Feature is active, PSM tries to find out the Serial Numbers, if not in the Import File. Also during the normal periodic Consumables Query, PSM corrects incomplete or changed incomplete Serial Numbers. Please note, that PSM does only do auto-correction, if the auto-import Feature is activated.

Bug Fix: Auto-Import did not process new Files

In some Situations, the Auto-Import Routine (if used) did import the File every Night, but did not process it.

Bug-Fix: Scan for Printers (both – batch and active scanning) did work very slow

PSM did perform all checks also on non responding IP Addresses. This has resulted in very poor response Times.

Bug-Fix: PSM811I and PSM812I Message corrected for Syslog

PSM 811 and 812 Messages where reported as PSM811W and PSM812W instead of PSM811I and PSM812I.

Bug-Fix: Kyocera Serial numbers correctly detected

Kyocera FS- Printers where detected, but the Serial Number was always empty

Enhancements / Bug Fixes – Version 4.10

Enhancement: Memory Limit increased for large Attachment Processing

PSM Counter Reports for Large installation did not had sufficient Memory to process all reports. Increased to 50MB

Bug Fix: New Style Reports “from / to” incorrectly detected

If there are missing Days in the Printer Tables or if a printer has been replaced, the starting Date was incorrectly detected, and therefore the Counter calculation could contain wrong Numbers.

Enhancements / Bug Fixes – Version 4.09

Enhancement: Syslog Logging for solved Errors



So far PSM did only write the Time, Date and Error Message, when a Printer enters Error State. Now PSM will also Log, when the Error State has ended.

Enhancement: Serial Number detection

If the auto-File Import is used, and a Serial Number was not detected during the Import, PSM tries to detect the Serial Number during the regular Consumable Queries and completed missing Serial Numbers.

Bug Fix: Errors not queries in all Situation

In some Situation PSM did not detect a Printer Error. This has been solved

Enhancements / Bug Fixes – Version 4.08

Enhancement: Speed increase for Auto Import, Scan for new Printers, Printer Query

There where 4 Steps to ensure that we were talking to a Printer, and to verify, that the Printer is Online. This check has been reduced to one single Step. This minimizes Network Load and speeds up all Scan Routines.

Enhancement: Profiles can be set to inactive

If someone wanted to disable Part Ordering and Notification for a Printer model, it was necessary to edit the Profile and set the Threshold Values for all Parts to 0. Now this can be done with one Click.

Enhancement: Printer Profile content copying

When the auto-Import Feature is used, new Profiles are created with the Printer-Model-Name submitted in the Import File. To allow quick Copying of an already existing Profile, while editing a new one, there is a Selection at the bottom, to select the already existing Profile content, you want to copy.

Enhancement: html Header is now using Product Name

Index.html has been replaced by index.php, to allow to Display the Product Name in the Browser Title.

Bug Fix: – removed unnesesary “#ressource ID” from Group Reports

Due to a Programming mistake, 4.07 has inserted a Variable in the CSV Group Reports. This has been fixed.



New Features – Version 4.07

New Feature: Auto-Import

Description

It is now possible to import a CSV File automatically to manage the Printers available inside PSM. The File to be imported has to be in the same Format compared to the one which can be exported from PSM. This means, PSM will check the complete Header (1th Line). **The minimum required Fields are IP Address/Host Name and Printer Model.** The Import Parameters can be specified in the “add new Printers” Section, Auto-Import. You will need to specify the FTP Server, Userid, Password and Directory, where PSM can get the File. PSM will download and process the File each Night at 11’40 pm.

Logic behind the automatic Import

- PSM will check, if there is already a Printer with a given IP-Address or Hostname in the Database
 - o If yes, the Model and Serial Number will be compared. If no Serial Number is given, PSM tries to get the Serial Number directly from the Printer
 - If there is a Match, PSM will only update other values like Group Name, Contact Person, Location. PSM considers this Update as “Non-Critical” and will not List it in the Results
 - If the IP Address exists, but with another Printer Model or Serial Number, PSM will delete the existing Printer and create a new one. If there is no Profile for the new Printer, PSM will check the whole Import File for other IP Addresses with the same Model, and tries to create a Profile, if at least one of this Printer responds to a Query. This update is considered as “Critical” and it will be listed in the Results.
 - o If there is no Entry for the given IP-Address/Hostname, the Printer will be created as “new”. If there is no Profile for the new Printer, PSM will check the whole Import File for other IP Addresses with the same Model, and tries to create a Profile, if at least one of this Printer responds to a Query. This update is considered as “Critical” and it will be listed in the Results.
- Printer exists in the Database, but not in the Import File:
 - o If you selected, to delete Printers not in the Import File, PSM will delete all Printers not present in the Import File, so please be careful when using this Option. If Printers are deleted, this will be listed in the Results.
 - o If you did not select to delete Printers not in the Import File, this Printers will be left untouched

General Rules

The following Rules apply to the Values for “Group Names” and “Profiles”

- 1th Priority is the Data you have specified in the Import File.
 - o If you did not specify one or more of the Group Names:
 - If the update is for an existing Printer, and if there is a value already in the Database, then the Value already in the Database will be used
 - If the Update is for an existing Printer, and the Value is not specified in the Database and not present in the Input File:
 - If you select to apply a specific Template, PSM will use the Values from the Template
 - If you specified “According to Template” PSM will find the right Template according to the IP Range the Printer belongs to, and it will use the Value from the Appropriate Template
 - o If you did not specify any Profiles (Error Profile / Counter Profile):
 - If the Printer is already in the Database, and the Printer Model does not change, PSM will use the Values already present.
 - If there is no Value in the Database, PSM will try to get the Value from the Template.
 - If a Template has not been specified, PSM will take the Values entered in the Printer Profile

For each automatic Import, the Resulting Log will be sent by Email to the specified Recipient(s). The Log will contain all relevant changes. If Profiles are automatically created, you will see that, when you Login to PSM, and you will need to complete them (fill in Part Numbers for example) and confirm them.



Enhancement: Batch Scanning of Class B Ranges

Description

With all Releases prior to 4.07 it was only possible to specify class C Ranges to generate Templates and for Batch Scanning. Now you can also specify class B Ranges.

Example 1:

From: 172.16.100.200 – 172.16.102.254

PSM will scan:

172.16.100.200 - 172.16.100.254

172.16.101.200 - 172.16.101.254

172.16.102.200 - 172.16.102.254

Example 2:

From: 172.16.100.0 – 172.16.102.255

PSM will scan:

172.16.100.1 - 172.16.102.254

Enhancement: Daily Status Email can be Switched on or off

Description

Some Users have complained about the Daily Status Email, which is sent at the same Time with the Orders. Now you can specify, if you want to have that Mail or not, and you can specify a separate Recipient(s) for the Status Email. This can be selected in the Administration Section > Scheduler.

Bug-Fix: HP LaserJet P1505 was not detected by PSM

Description

Due to some non-Standard SNMP Implementation in this Printer Model, PSM was not able to detect this Printer Model. This has been corrected.



New Features – Version 4.06

New Feature: MIB Browser

Reason

When someone has to create new Profiles, and the Manufacturer has no Information about the Printer MIB Available, the only chance to find out the correct printer MIB, is to do a MIB Walk on the Device. Since under normal Conditions nobody has a MIB-Browser on the PC, we decided to include one inside PSM.

Usage

You'll find the MIB Browser in the Administration Section of PSM. The only thing you have to do is to type the IP Address or Host Name of the Device you want to query. After approximately 30 Seconds, PSM will display the MIB Table of the Device. You can save the Results to an Excel File or you can directly send the Excel File by Email.

Example

If you want to find out, where the Counters are located, just do a Query of the Device. After that save the Results, go to the Device and Print out the Testpages with the Counters. Then Locate the different Counter values in the Excel File.

Other Enhancements, Corrections and Bug Fixes – Version 4.06

Bug Fix: Sending Emails with an Attachment (again)

After some Onsite verification at Customer Sites, we are now using a complete new Mail Program for all Situations, where we need to send Attachments. The Email are sent using base64-encoding rather than quoted printable.

Bug Fix: Yellow Alerted Printers, when they should not be yellow

In some Situations, printers where marked Yellow, even if the Threshold was not reached. This was caused by a misinterpretation of the Toner Service Alert Threshold, if set. The Error has been corrected.



New Features – Version 4.04 / 4.05

New Feature: Printer-Profile auto-creation / Printer Profile extension

Auto-Creation

In the past, each Time when you added new Printers and a Profile was not present, you had to stop and create the Profile, before you were able to add the Printer.

Now, PSM will automatically create the Printer Profile for you. On the Main Screen you will be noted by a Yellow Colored Bottom-Line Message, that there are new Profiles, which have been auto-created. You should verify these Profiles and make sure, that you enter the Part Numbers for the Consumables, and that you set the Threshold Values according your needs. You will not be able to modify existing Profiles, as long as you haven't verified the new Profiles and clicked at least once on "Save" or "Save and Apply".

Selecting Default Counter Profile, Error Profile and Error Notifications within the Printer Profile

It is now possible, to point to an existing Counter Profile and Error Profile within the Printer Profile. If you click on "Save and Apply", these Values will be applied to all Printers using that Profile.

Additionally, if new Printers are added, PSM will use the Counter Profile and Error Profiles which are selected as Default within the Printer Profile. This will save a lot of Time when you add new Printers.

New/Changed Feature: Printer Import

Importing Printers from a CSV File has been completely re-designed.

Different from earlier Software Versions, the Import will take place immediately with no further Warning!

The Import File can contain from only as little as the IP Address/Host Name, the Printer Model and the Serial Number, up to the maximum Information which is for example contained in the Export File.

At the End of the Import, a List with all relevant changes is shown.

To find out what Rules PSM is using for the Import, Please check the Online Help, while you are in the "Add Printers" Screen.

Note: This is a pre-Release for a Future automation. In Future Versions you will have the ability to automatically import from a CSV File, or to Scan for new Printers and automatically add them.

New Feature: Printer History / Consumables Log at Printer Detail Level

In the Printer Detail Screen (Part 1) you will see an additional "Lens" Graphic, which, when clicked, will bring up the whole Printer History in a new Window.

Part 2 (Consumable Ordered so far) has been enhanced: You will also see the average Consumable Level, when the Parts have been replaced, and for each Part you can bring up the History on Screen, by clicking on the "Lens" Symbol.

Please Note that the History only contains Entries made from the Time on, when you have installed Version 4.05!



Other Enhancements, Corrections and Bug Fixes – Version 4.04/4.05

Bug Fix: Sending Emails with an Attachment

A Correction has been implemented to avoid the following Situations:

- Automatic and Statistics and/or Report Files have not been sent, or sent corrupted
- Statistics have not been generated at all

Enhancement / Bug Fix: Email in General

- The Email Sending Program has been changed to get back more Information about success or not, when an Email is sent. If there is an Error, it will be logged in the Printers Error Log.
- An Error has been corrected, which has caused Emails not to be sent over some Mail Servers, if a Mail Server other than Localhost has been used in combination with Authentication.
- The Email Setup Screen now displays the Entered Information correctly (Username / Password). This was a cosmetic Bug only.
- The Email Test Function on the Email Setup Screen now sends an additional Test Email which contains an attachment. This is to verify, if attachments will work on your Email Server.

Enhancement: Daily Status Email

An Email to the Recipients specified as “General Email Recipients” in the Email Setup will be sent out once a Day, at the Time specified as the Order Time in the Scheduler. This Email will be sent regardless if there are Orders or not.

The purpose of this Email is to show that PSM is still alive and to show eventual Problems like expired Licenses and Unverified Printer-Profiles.

Bug Fix: Backup on PSM VMWare Version

When a high Number of Files had to be Backed up, not all Files were implemented in the Backup, due to a Limitation in the Linux Tar Program under Ubuntu. This has been corrected.

Bug Fix: Consumable Replaced at xx% has been logged multiple Times

Due to an Error, there could have been hundreds of Times the same Entry in the Log, when a Toner has been replaced. This Update Version will delete these Entries and will write the Replaced Message only once in the Log.

Change: Error Ticket Files will be kept now only for 90 Days.

Since you will see already the Error Messages in the Log, there is no reason to keep the Files which have been mailed, too. Therefore we decided to keep the Files only for 90 Days. The Message Log itself is not affected.

Enhancement: Printer Overview

If you sort the Printer Preview Screen by “Show Printers with Errors first”, the Sorting Order has changed.

1. Printers with Errors (Red)
2. Printer with a Consumable below Toner Service Alert Threshold (Yellow with Red marked Part)
3. Printers with at least one open Order (Yellow)
4. All other Printers



New Features – Version 4.01

New Feature: Reports and Evaluations

Overview

One of the most Powerful new Features is the Reporting Function. In earlier System you only had the possibility to gather the actual Page Counts and Consumables ordered so far. Now you can generate Reports with a lot of different Criteria's and choose to also specify a Time Period for the Results you want to see.

The System uses two categories of Reports:

Automatic Reports: They are executed automatically at the beginning of a given Period (1th Day of Week, 1th Day of Month, and 1th Day of Year) and will be sent to the defined Recipients by Email.

Manual Reports can be executed on demand by clicking on the "Read" Symbol. The Results are listed on a HTML Page and can be saved in Excel or CSV Format.

Important to know: All Types of Reports can only contain Data from the Time it has been added to the System, to today minus one Day!! The Reason for this is, that the System calculates only once a Night (at Midnight) the values for each Device and inserts it into the Printer Table. This is to reduce System load.

Create / Change Reports

You can define a large Number of Criteria's and Limitations for your Report, such as Groups and Time Periods. Additionally you can restrict the Reports to only include a certain Serial number or IP Address or Printer Name. The only required Parameters are: Report Name, Report Type and - if you choose to generate an Automatic Report definition: at least one Email Address.

Hint: If you want to copy an existing Report Definition, chose an existing Report from the Dropdown Menu and click on "change/view". Then just overwrite the Name of the existing Report with a new Name.

Report Types

There are 4 different Report Types from which you can choose.

1 - Printed Pages by Device & Number of Errors

This will list all Devices matching your Criteria's, including the Number of Errors and the Current Page Counters. At the End of the Table you will see the Total Number of Errors and Total Page Counter of all Devices.

2 - Printed Pages by Device detailed with Number of Errors

The Results will be grouped by Counter Profile and shown in different Tables. The Reason for this is, that the readable Counters for different Manufacturers and - in case of Ricoh also of different Models - are different, and cannot be compared against others. At the End of each Table the Totals will be shown.

3 - Consumables by Device, Detailed

The Results will be grouped by Device Model and shown in different Tables. The Reason for this is, that each Device Model has different Consumable Parts, Part Numbers and Descriptions and cannot be compared against others. At the End of each Table, the Totals will be shown.



4 - Consumables Total, sorted by Part Number

This Report generates a Summary of all Parts ordered within the given Time Period. You will see the Part Number, Description, and Ordered Quantity.

Report View

If you display the Report Result, you can click on the Serial Number or IP Address of each displayed Device. When you do this while displaying the Results for Report Type 1 or 2, you will get a Popup, where you can see all Messages for the given Time Period.

When you do this while displaying the Result for Report Type 3 you will see the Consumable related Messages for the given Time Period.

Please Note: After upgrading to Version 4 you will already get Results, since the Counters were recorded already since an Early Version 3.xx . However, the Numbers were not always correct, since certain HP Color Printers sometimes reports 0 while in Sleep Mode. Also the Logging for Consumable started at Version 4, so you will see no Log Entries at the beginning.

New Feature: Printers for Inventory only

So far PSM considered all Printers as active Printers. Some Companies wanted to have also Printers on Stock, or Spare Printers within PSM, for Inventory Reasons. These Printers should be in the Database, but should not be queried.

Now this is possible. If you use Hostname/IP Address Name LAGER_ or STOCK_ , PSM will consider these Printers as inactive. You have to keep in mind, that the Main Key for all Printer Related Databases is the Hostname/IP Address. So you need to define a Unique Name. We recommend using for example the Location, where the Printer is stored and the Serial Number.

Example: STOCK_BERN_CNCYF2998.

If you re-define a single active Printer, PSM will automatically add the Serial Number at the End of the Name.

In "Show or change the Status of the defined Printers" Display, you have an additional Tab, which allows you to select, wherever you want so see active- or stock Printers.

New Feature: SYSLOG and Enhanced Logging

All Events (Printer Errors, Toner Messages, adding, removing or changing relevant Printer Parameters) are now logged in both, PSM's internal Database and Linux Syslog. This makes it possible to redirect PSM Messages to other Syslog Systems, by reconfiguring Linux Syslog to point to an existing Syslog Server for example.

Additionally, PSM will now also Log the Percentage Left, when a Part has been exchanged. This helps to identify Printers, where the Consumable Parts are exchanged too early, for example if Parts need to be changed always at 10% left already, because you are using bad Quality Refill-Toner.

New Feature: PSM LITE Support

PSM Lite is a small Hardware Box for Companies with 25 Printers or less. It has the same Functionality compared to the Rack- or VMWare Version. However, PSM Lite does not have it's own internal Mail Server. Therefore PSM Lite needs to make use of the Customers internal Mail server or it needs to be able to connect to the Internet to use the ISP's Mail server.

While Introduced in V3.40 as Beta Version, PSM Lite is now officially ready, when upgraded to Version 4.



New Feature: Manage Printer Names, Location and Contact Person inside the Printers

Quite a while ago, we asked the PSM Forum Users, if there is a need, that PSM can write the defined Printer Name, Location and Contact Person into the Printers. The Answers were different.

While a view Users did not want it, others wanted to have that Feature, but in different Ways.

PSM will definitely not be rewritten to be a Management Application, but for this small Part, it is sometimes a real help. A lot of Companies do have Lists with their Printers, Contact Persons and Locations, but did not configure this values inside the Printers. Since PSM's main Function is Consumable Ordering, the Contact Person and Location needs to be inside PSM. So the work needs to be done anyway. So why not allow PSM to configure these values inside the Printers. It is a more or less political Question. We decided to have different possibilities:

No Management

No Management means, it is like it was before: PSM does only Read from the Printers by SNMP. This is still the default. PSM is using the SNMP Read Community Name configured in the Administration Section (Email Setup, Admin Password and Language). Usually this Name is "public".

Managed

Managed means, that PSM can write Printer Name (only if the Printer is not configured with DHCP) Contact Person and Location to the Printers. To be able to do that, PSM needs to know the SNMP Write Community Name of the Printers (which is usually the Device- or Network Card Password when using HP Printers).

If no Write Community Name has been configured, try using "public".

If all Printers defined inside PSM are using the same SNMP Write Community Name, it is simple. However, some Companies have different Passwords on their Printers. So therefore we have made two possibilities:

Global

This Method is useful, if all, or the majority of the Printers have the same SNMP Write Community Name. PSM is using the SNMP Write Community Name configured in the Administration Section (Email Setup, Admin Password and Language).

Local

If your printers do have a different SNMP Write Community Name, you can configure the Value directly at each Printer. You can also use the Serial Mutation; add Printers Templates or Export / Import Routines for the individual Printer Configuration.

Mixed

A mixed Method is useful, if most of your Printers have the same Write Community Password.

If you configure a Write Community Password at Printer Level, PSM will use it. If you haven't defined a Write Community Password at Printer Level, PSM will check, if you have defined one at Global Level, and use that instead.

Things to consider:

- PSM only writes Values to the Printers when using one of the add or modify Printer Operations (including Import and Series Mutation)
- Writing Values to the Printers will slow down Series-Functions such as Series Mutation
- If wrong SNMP Write Community Names are used, Series-Functions such as Series Mutation will be extremely slow
- PSM does not Log Results of this Function

We DO NOT RECOMMEND using this Feature, if you are using another Management Application already to configure the Printer Names, Contact Persons and Locations. This Feature has only be tested with HP Printers so far.



Note regarding HP LaserJet 2100 and 2200 Printers

We have done a lot of Efforts to support these Printers, but we have not succeeded. HP does not Support the Printer for Toner Orders inside WebJetAdmin, since it does not support Consumable Status Values by SNMP. We made a PJI Query Routine, but also this did not help.

Finally we found, that the Printer does not even have a Toner Sensor. If the Toner is empty, it still prints – white Pages.

Therefore we herewith confirm that WE DO NOT SUPPORT LJ2100 and 2200 inside PSM for Toner Ordering.
We recommend replacing these Printers with newer Models.

