

## ***PAMtutorials* 16: Printers (Who, What, Where and When)**

### **PIPER-Rx Application Monitor – *PAM* VIRTUAL APPS ADMINISTRATOR**

***PAM*** Version 4.0

*“Blurring the line between software product and training”*

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## 1 What you'll get out of PAMtutorials16

The actual process of configuring printers is not covered in this tutorial; there is plenty of good documentation available from Oracle on printer configuration.

Instead, we focus on the things you would typically like to know about printers as part of best practice application administration. In this tutorial we aim to answer the following questions:

- ❖ What have my printers been printing?
- ❖ Who has been using my printers and when?
- ❖ Are my printers load balanced?
- ❖ Who has a printer defined at the profile options level?
- ❖ Has a large print request been submitted?

**Note:** Once a print request has been created it is passed to the operating system (OS) for printing. Once the print request has been handed over to the OS we can no longer track the request via the OEBS application. The exception is where the print request returns an error or cannot access the printer; that concurrent request will be marked with a request completion status of warning. Also of note is that without reading the print requests "out file" we cannot determine the number of pages to be printed, what we can determine is the file size being sent to the printer.

## 2 Printer performance issues

In the IT world, the term “end to end” is predominantly based around internal application transactions or in effect any transaction that can be measured. When it comes to printing reports, my view (and most users) of end to end is the time taken from the moment the report is requested to the time it has completed printing. If a print request is in the print queue for a long period of time before it prints it should be considered as an overall performance issue.

Often when a print request is in a print queue waiting to be printed, the user concludes, albeit wrongly, that the request either may not have been correctly submitted, did not run or did not print. The user will then submit the request again and again resulting in duplicate requests. These duplicate requests are a waste of resources, particularly at peak times and need to be monitored and discouraged. This issue is covered in detail in **PAMtutorials 7: Managing user behaviour through fear and guilt (I know what you did and when you did it) - Duplicate requests.**

It is equally important to load balance each of your printers, e.g. sending 2,000 requests to a slow printer and only 200 requests to a high speed printer is highly inefficient and should be investigated. Load balancing printers should form part of your normal regular application performance review.

### 3 PAM Large Print Job Alert

In recognition of the potential for performance issues with large print jobs, when **PAM** detects a larger print job has been sent to any of the registered printers **PAM** will generate the following e-mail alert:

#### Example **PAM** PR-001 – **PAM** Large Print Job e-mail alert message

**ALERT MESSAGE FROM **PAM** - PIPER-Rx Application Monitor - DO NOT REPLY**

Company = Company Name

Site = APPS 12i

Alert Level = **Warning**

Detected = 17-Aug-11 (Wed) 15:31:39

Alert Frequency = 10 Minutes

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**At 17-Aug-11 14:12 a print job (request id: 4431181) of 6.7 Mb was sent to printer - noprint**

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**Alert Information:**

**PR-001 Large Print Request Detected.**

**A PRINT JOB WITH A PRINT FILE SIZE GREATER THAN THE **PAM** THRESHOLD VALUE (Mb) HAS BEEN SENT TO A PRINTER.**

Sending very large files to a printer may hold up print requests submitted after the large request has started to print, potentially causing a backlog of print jobs for that printer. As reviewing the print queue at the operating system level is not readily available to the end user, it has been known for users to resubmit the same request (duplicate requests) on the mistaken belief that their request did not run.

You can use **PAMreports** - Printers **PAMPR031 Printed By Printer** or **PAMPR032 Printed By Printer - Period** to identify requests that have generated the very large print requests.

Using the request id of the large print request you can use **PAMreports** - Printers **PAMPR041 Printed Backlog** to list all print requests that have been submitted after the large print request. This report shows the possible effect of the backlog and who may have been affected.

**Note:** The size of a print request is calculated as the size of the concurrent requests “outfile” (report) multiplied by the number of copies of the report.

### 3.1 What to do with this information

When alerted to the existence of a large print job, you can use **PAMreports** - Printers **PAMPR040 Printer Large Print Jobs** to list all print requests greater than the **PAM** alert threshold for each application registered printer:

Example **PAMPR040 Printer Large Print Jobs** report

PAMPR040-20								PAM - PIPER-RX - APPLICATION MONITOR		PIPER - Rx
Large Print Jobs								As at 23-AUG-11 15:08		For APPS 12i
Printer	Request Id	Completion Date	Requestor	Program Name	File Size (Mb)	Copies	Est Mb			
noprint	4431181	17-Aug-11 14:12	SYSADMIN	OAM Applications Dashboard Collection	3.3	2	6.7			

You can also use **PAMreports** - Printers **PAMPR041 Printed Backlog** to list all print jobs that have been sent to the target printer after the large print job was submitted. This report should allow you to identify the back log and who may have been affected by the large print request. This report uses the printer name and the request id of the large print request provided in the **PAM** alert:

Example **PAMPR041 Printed Backlog** report

PAMPR041-20								PAM - PIPER-RX - APPLICATION MONITOR		PIPER - Rx
Printed Backlog								Caused By Request ID - 4431181		For Printer - noprint
As at 17-AUG-11 15:40								For APPS 12i		
Request Id	Completion Date	Requestor	Appn	Program Name	Copies	Est Mb				
4431183	17-Aug-11 14:33	SYSADMIN	FND	OAM Applications Dashboard Collection	1	0.1				
4431182	17-Aug-11 14:22	SYSADMIN	FND	OAM Applications Dashboard Collection	2	4.8				
4431181	17-Aug-11 14:12	SYSADMIN	FND	OAM Applications Dashboard Collection	2	6.7				

The entered request will be highlighted in blue.

## 3.2 Turning the large print jobs alert off and on

The **PAM** large print jobs alert can be turned off using the following **PAM** API:

```
exec PIPER_RX_PAM_API.PAM_ALERT_ENABLE ( 'PR-001', 'N' );
```

The alert can be re-enabled using the following **PAM** API:

```
exec PIPER_RX_PAM_API.PAM_ALERT_ENABLE ( 'PR-001', 'Y' );
```

## 3.3 Large print job thresholds

On the understanding there are some sites with printers configured specifically for print large print jobs such as invoices and statements etc... and that we don't want an alert every time a large print job is sent to these specific printers, **PAM** provides the ability to set the large print job threshold on a per printer basis.

On install **PAM** will collect information on all registered printers and set the print threshold to the **PAM** default value. **PAM** will then evaluate the print job sizes sent to each printer and set the **PAM** threshold for that printer to the historical average print job size plus three standard deviations.

In addition:

- ❖ Once per day **PAM** will check and update its printer information for any printers have been added or removed from the OEBS application.
- ❖ Once per week **PAM** will update the large print job thresholds setting the **PAM** threshold for each printer to the historical average print job size plus three standard deviations..

You can use **PAMreports** - Config **PAMC023 Printer Exceptions** to list all **PAM** registered printers and their individual thresholds.

Example **PAMC023 Printer Exceptions** report

PAMC023-20		PAM - PIPER-RX - APPLICATION MONITOR PAM Printer Exceptions As at 23-AUG-11 15:26 For APPS 12i			PIPER - Rx
Printer	Printer Description	Check Status	Threshold (Mb)	Allow Auto Threshold	
adsprinter	PCL	Enabled	5.0	Yes	
LabelPDF	PDF Printer for WMS Labels	Enabled	5.0	Yes	
LoftwareLPS	Loftware LPS Printer - Please Assign IP Number	Enabled	5.0	Yes	
noprint		Enabled	5.0	Yes	
Zebra	Zebra Label Printer	Enabled	5.0	Yes	

Default PAM print size threshold value (Mb) 5.0

**NOTE:** So as to prevent very low thresholds being automatically set by **PAM**, **PAM** uses the default threshold level as the minimum value for the auto threshold values. That is, if the calculated threshold value is below the **PAM** default threshold value, **PAM** will set the threshold value to the default threshold value.

### 3.4 Setting the global default large print job threshold value

The **PAM** global default large print request threshold value (Mb) can be set using the following **PAM** API:

```
exec PIPER_RX_PAM_PR_MONITOR.pam_pr_default_threshold_set ( 5 )
```

Parameter: The large print job size in Mb – The minimum threshold value is 1 Mb; any entered value less than 1 Mb entered will be set to 1 Mb

**Note:** The default print size (Mb) entered will be rounded to a whole number

### 3.5 Setting individual printer thresholds

Individual printer thresholds can be set using the following **PAM** API:

```
exec PIPER_RX_PAM_PR_MONITOR.pam_pr_threshold_set ('noprint', 3.5 );
```

Parameter 1: The printer name (not case sensitive)  
 Parameter 2: The large print job size in Mb – The Minimum threshold value is 1 Mb; any entered value less than 1 Mb entered will be set to 1 Mb

**Note:** If you do not turn off auto threshold for the printer **PAM** will update the threshold during its next auto threshold update



### 3.5.1 Turning a printers auto threshold setting off

The auto threshold feature can be turned on or off for any individual printer using the following *PAM* API:

```
exec PIPER_RX_PAM_PR_MONITOR.pam_pr_auto_threshold_set ('noprint', 'N' );
```

Parameter 1: The printer name (not case sensitive)

Parameter 2: Y = Enable, N = Disable auto threshold for the printer

### 3.6 Suspending a printer from the large print job alert

Each individual printer can be excluded from the large print request alert using the following *PAM* API:

```
exec PIPER_RX_PAM_PR_MONITOR.pam_pr_alert_status ('noprint', 'Y' );
```

Parameter 1: The printer name (not case sensitive)

Parameter 2: Y = Include the printer, N = Exclude the printer from the *PAM* large print job alert

## 4 Reference Reports

**PAMreports** - Printers provides a number of reference reports for printer configuration:

### 4.1 Printer List

**PAMreports** - Printers **PAMPR001 Printer List** is a simple report that lists the configured printers for your application. Included in this report are both the printer's creation and last updated information:

Example **PAMPR001 Printer List** report

PAMPR001-20		PAM - PIPER-RX - APPLICATION MONITOR			PIPER - Rx	
Printer List						
As at 17-AUG-11 15:35						
For APPS 12i						
Printer	Printer Description	Type	Type Description	Created Date / By	Last Updated Date / By	
adsprinter	PCL	HPLJ4SI	PCL	26-Jun-98 SYSADMIN	26-Jun-98 SYSADMIN	
LabelPDF	PDF Printer for WMS Labels	Label	Label Printer	10-Aug-01 TMS	10-Aug-01 TMS	
LoftwareLPS	Loftware LPS Printer - Please	Label	Label Printer	12-Nov-04 MFG	12-Nov-04 MFG	
noprint		HPLJ4SI	PCL	01-Jul-01	01-Jul-01	
Zebra	Zebra Label Printer	Label	Label Printer	26-May-05 MFG	26-May-05 MFG	

### 4.2 Printer Configurations

Each printer has a number of styles and associated drivers. **PAMreports** - Printers **PAMPR002 Printer Configurations** lists the configuration styles and driver information for a selected printer:

Example **PAMPR002 Printer Configurations** report

PAMPR002:20		PAM - PIPER-RX - APPLICATION MONITOR		PIPER - Rx	
Printer Configurations					
Printer - noprint					
Printer Type - HPLJ4SI -PCL					
As at 17-AUG-11 15:36					
For APPS 121					
<b>Printer Style:</b>	<b>A4</b>	<b>A4</b>	<b>Supress Page Header:</b>		
<b>Driver:</b>	A4HPLJ4SI	<b>Driver Name:</b>	A4HPLJ4SI	<b>OS:</b>	
<b>Driver Full Name:</b>	A4 for Printer HPLJ4SI				
<b>Driver Description:</b>					
<b>Driver Method:</b>	Command	<b>Supress Page Header:</b>	<b>Create Copy:</b> No	<b>STDIN Accepted:</b> No	
<b>Command Name:</b>					
<b>Arguments:</b>	lp -c -d\$PROFILES\$.PRINTER -n\$PROFILES\$.CONC_COPIES -t"\$PROFILES\$.TITLE" \$PROFILES\$.FILENAME				
<b>Initialisation:</b>	/eE/e&J1o26a5.45C/e(s0p16.66H/e&k6.75H				
<b>Reset String:</b>	/eE				
<b>Attribute Category:</b>					
<b>Printer Style:</b>	<b>AUSTRIAN Format 1</b>	<b>AUSTRIAN Format 1</b>	<b>Supress Page Header:</b>		
<b>Driver:</b>	AUSTRIANF1HPLJ4SI	<b>Driver Name:</b>	AUSTRIANF1HPLJ4SI	<b>OS:</b>	
<b>Driver Full Name:</b>	AUSTRIAN Format 1 for Printer HPLJ4SI				
<b>Driver Description:</b>					
<b>Driver Method:</b>	Command	<b>Supress Page Header:</b>	<b>Create Copy:</b> No	<b>STDIN Accepted:</b> No	
<b>Command Name:</b>					
<b>Arguments:</b>	lp -c -d\$PROFILES\$.PRINTER -n\$PROFILES\$.CONC_COPIES -t"\$PROFILES\$.TITLE" \$PROFILES\$.FILENAME				
<b>Initialisation:</b>	\eE/e&J0o8D/e(s0P/e(s10H/e(s16901T				
<b>Reset String:</b>	\eE				
<b>Attribute Category:</b>					

### 4.3 Printer Profile Options

Ever wondered where a printer has been set at the profile options level? Or you are about to replace a printer, but you don't know who has that printer set as their default printer? You really need to know who has the printer set as their default so you can proactively advise them of the change and how to reconfigure their default printer (they will have forgotten how....).

**PAMreports** - Printers [PAMPR003 Printer Profile Options](#) lists all the profile options where a selected printer has been set:

Example **PAMPR003 Printer Profile Options** report

PAMPR003-20				
PAM - PIPER-RX - APPLICATION MONITOR				
Printer Profile Options				
For - noprint :				
As at 17-AUG-11 15:36				
For APPS 12i				
PIPER - Rx				
Profile Level	Type			
Level Name		Updated By	Last Updated	Update Age YY:MM:DD
<b>Site Level</b>				
Site	GERMANY		24-Jan-02	09:06:08
<b>Responsibility Level</b>				
FED Cash Management		PROFILEOPTION	11-Oct-04	06:10:16
FED Federal Administrator		PROFILEOPTION	11-Oct-04	06:10:16
FED General Ledger Super User		PROFILEOPTION	11-Oct-04	06:10:16
FED General Ledger User		PROFILEOPTION	11-Oct-04	06:10:16
FED Payables Inquiry		PROFILEOPTION	11-Oct-04	06:10:16
FED Payables Super User		PROFILEOPTION	11-Oct-04	06:10:16
FED Payables User		PROFILEOPTION	11-Oct-04	06:10:16
FED Purchasing Buyer		PROFILEOPTION	11-Oct-04	06:10:16
FED Purchasing Receiver		PROFILEOPTION	11-Oct-04	06:10:16
FED Purchasing Requestor		PROFILEOPTION	11-Oct-04	06:10:16
FED Purchasing Super User		PROFILEOPTION	11-Oct-04	06:10:16
FED Purchasing User		PROFILEOPTION	11-Oct-04	06:10:16
FED Receivables Inquiry		PROFILEOPTION	11-Oct-04	06:10:16
FED Receivables Super User		PROFILEOPTION	11-Oct-04	06:10:16

**Note:** This report covers Site, Application, Responsibility and User levels only

#### 4.4 Printer Types, Styles and Drivers

This set of **PAMreports** are basic lists of application registered printer types, styles and drivers. These reports can be used to assess the consistency across your printer definitions and /or to provide valuable reference information when configuring a new printer.

##### 4.4.1 Printer Types

A printer type is used to describe the printer manufacturer and model. The **PAM** printers report **PAMPR010 Registered Printer Types** lists your application’s registered printer types:

Example **PAMPR010 Registered Printer Types** report

PAMPR010-20 PAM - PIPER-RX - APPLICATION MONITOR Registered Printer Types As at 17-AUG-11 15:37 For APPS 12i PIPER - Rx			
Printer Type	Type Description	Creation Date / By	Last Updated Date / By
--PASTA Universal Printer Type	The printer type that can support many printers and language...	10-Jun-02	10-Jun-02 SYSADMIN
APPLE	Apple Laser Writer	15-Dec-93	15-Dec-93
DMTX1	Epson DMTX1	15-Dec-93	15-Dec-93
EPOCH	CCTL	10-Jul-96	10-Jul-96
EPSON	PCL	17-Feb-99	17-Feb-99
FX850	Epson FX850 Dot Matrix printer	10-Jul-96	10-Jul-96
HP256X	PCL	10-Jul-96	10-Jul-96
HPLJ2	PCL	10-Jul-96	10-Jul-96
HPLJ3	PCL	10-Jul-96	10-Jul-96
HPLJ3-A4	PCL	10-Jul-96	10-Jul-96
HPLJ3si	PCL	10-Jul-96	10-Jul-96
HPLJ4	PCL	17-Feb-99	10-Sep-00
HPLJ4SI	PCL	10-Jul-96	10-Jul-96
HPLP	CCTL	10-Jul-96	10-Jul-96

4.4.2 Printer Styles

A printer style defines how the report should be formatted. A printer can have more than one style. The **PAM** printers report **PAMPR011 Registered Printer Styles** lists your application’s registered printer styles:

Example **PAMPR011 Registered Printer Styles** report

PAMPR011-20 PAM - PIPER-RX - APPLICATION MONITOR Registered Printer Styles As at 17-AUG-11 15:37 For APPS 12i PIPER - Rx			
Printer Style	Style Description	Creation Date / By	Last Updated Date / By
<b>1099R PORTRAIT</b>	Portrait - For Seeded 1099R Information Return	31-May-03	03-Jan-07
<b>Description:</b>	Portrait - For Seeded 1099R Information Return		
<b>Orientation:</b>	Portrait	<b>Width:</b> 132	<b>Length:</b> 100
<b>SWR Driver:</b>	LW2		<b>Suppress Header Page:</b> No
<b>A4</b>	A4	12-Jun-97	12-Jun-97
<b>Description:</b>	Landscape	<b>Width:</b> 132	<b>Length:</b> 62
<b>Orientation:</b>	A		<b>Suppress Header Page:</b> No
<b>SWR Driver:</b>	A		
<b>AUSTRIAN Format 1</b>	AUSTRIAN Format 1	12-Jun-97	12-Jun-97
<b>Description:</b>	Landscape	<b>Width:</b> 180	<b>Length:</b> 65
<b>Orientation:</b>	HPA		<b>Suppress Header Page:</b> No
<b>SWR Driver:</b>	HPA		
<b>AUSTRIAN Format 2</b>	AUSTRIAN Format 2	12-Jun-97	12-Jun-97
<b>Description:</b>	Landscape	<b>Width:</b> 180	<b>Length:</b> 65
<b>Orientation:</b>	HPA		<b>Suppress Header Page:</b> No
<b>SWR Driver:</b>	HPA		
<b>AUSTRIAN Format 3</b>	AUSTRIAN Format 3	12-Jun-97	12-Jun-97
<b>Description:</b>	Landscape	<b>Width:</b> 180	<b>Length:</b> 65
<b>Orientation:</b>	HPA		<b>Suppress Header Page:</b> No
<b>SWR Driver:</b>	HPA		

4.4.3 Printer Drivers

A printer driver defines the printer commands the printer will use to print the report based on the selected style. The **PAMreports** - Printers **PAMPR012 Registered Printer Drivers** lists your application’s registered printer drivers:

Example PAMPR012 Registered Printer Drivers report

PAMPR012-20		PAM - PIPER-RX - APPLICATION MONITOR			PIPER - Rx
Registered Printer Drivers					
As at 17-AUG-11 15:37					
For APPS 12i					
Printer Driver	Driver Description	Platform	Creation Date / By	Last Updated Date / By	
<b>A4CMD</b>	A4CMD	Sequent DYNIX/ptx	18-Jul-97	18-Jul-97	
<b>Driver Full Name:</b> A4 Command <b>Driver Description:</b> A4 Command <b>Driver Method:</b> Command <b>Supress Page Header:</b> <b>Create Copy:</b> Yes <b>STDIN Accepted:</b> No <b>Command Name:</b> <b>Arguments:</b> lp -c -d\$PROFILES\$.PRINTER -n\$PROFILES\$.CONC_COPIES -t"\$PROFILES\$.TITLE" \$PROFILES\$.FILENAME <b>Initialisation:</b> /e[lp/e]223 J/e[15m <b>Reset String:</b> /e[lp <b>Attribute Category:</b>					
<b>A4CMD</b>	A4CMD	HP/UX -- Non-CPU	18-Jul-97	18-Jul-97	
<b>Driver Full Name:</b> A4 Command <b>Driver Description:</b> A4 Command <b>Driver Method:</b> Command <b>Supress Page Header:</b> <b>Create Copy:</b> Yes <b>STDIN Accepted:</b> No <b>Command Name:</b> <b>Arguments:</b> lp -c -d\$PROFILES\$.PRINTER -n\$PROFILES\$.CONC_COPIES -t"\$PROFILES\$.TITLE" -s \$PROFILES\$.FILENAME <b>Initialisation:</b> /e[lp/e]223 J/e[15m <b>Reset String:</b> /e[lp <b>Attribute Category:</b>					
<b>A4CMD</b>	A4CMD		18-Jul-97	18-Jul-97	
<b>Driver Full Name:</b> A4 Command <b>Driver Description:</b> A4 Command <b>Driver Method:</b> Command <b>Supress Page Header:</b> <b>Create Copy:</b> Yes <b>STDIN Accepted:</b> No <b>Command Name:</b> <b>Arguments:</b> lp -c -d\$PROFILES\$.PRINTER -n\$PROFILES\$.CONC_COPIES -t"\$PROFILES\$.TITLE" \$PROFILES\$.FILENAME					

## 5 Printer Usage Reports

### 5.1 Technical

For the technically minded, nearly all the information you require to determine a concurrent requests target printer and print size can be found for each request in the [fnd\\_concurrent\\_requests](#) table:

Column Name	Description
printer	The name of the printer to print the request
number_of_copies	The number of copies of the report to print.
status_code	A status code of 'G' indicates the request completed with a status of warning
ofile_size	The report size in bytes
lfile_size	The reports log file size in bytes

**Note:** If number of copies = 0 the report will not print

### 5.2 Print Size Calculation

**PAM** calculates the estimated print size as the concurrent request “ofile” size in Mb multiplied by the number of copies.

**Note:** Any request with the [number\\_of\\_copies](#) value set to zero (0) will not print.

### 5.3 Printer activity summary by requests

You can use **PAMreports** - Printers [PAMPR020 Printer Usage By Requests](#) to show the number of requests submitted and the total estimated print size (Mb) for each of your registered printers.

**Note:** This **PAM** report only lists requests sent to a printer where the value for [number\\_of\\_copies](#) is greater than zero.

You can use this report as part of your printer load balancing program:

Example **PAMPR020 Printer Usage By Requests** report

PAMPR020.20		PAM - PIPER-RX - APPLICATION MONITOR			PIPER - Rx	
Printer Usage by Number of Requests						
Sample Period - 10 days						
As at 18-AUG-11 15:20						
For APPS 12i						
Printer	Printer Description	Type	Type Description	Requests	Est Mb	
noprint		HPLJ4SI	PCL	5	11.6	
adsprinter	PCL	HPLJ4SI	PCL	0	0.0	
LabelPDF	PDF Printer for WMS Labels	Label	Label Printer	0	0.0	
LoftwareLPS	Loftware LPS Printer - Please	Label	Label Printer	0	0.0	
Zebra	Zebra Label Printer	Label	Label Printer	0	0.0	

As this report references information in the [fnd\\_concurrent\\_requests](#) table, the amount of data available is dependent on your site’s concurrent requests purging policy.

The variable ‘sample days’ is used to set the number of day’s history in the report.

**5.4 Printer activity summary by users**

You can use **PAMreports** - Printers **PAMPR021 Printer Usage By Users** to show the application users that have been using each of your registered printers, including the total estimated print size (mb) they have sent to the printer.

**Note:** This **PAM** report only lists requests sent to a printer where the value for **number\_of\_copies** is greater than zero.

Example **PAMPR021 Printer Usage by Users** report

PAMPR021.20		PAM - PIPER-RX - APPLICATION MONITOR			PIPER - Rx	
Printer Usage By Users						
Sample Period - 10 days						
As at 17-AUG-11 15:38						
For APPS 12i						
Printer	Printer Description	Type	Type Description	Requests	Est Mb	
User Name	User Description					
adsprinter	PCL	HPLJ4SI	PCL	0	0.0	
		No Printer Activity				
LabelPDF	PDF Printer for WMS Labels	Label	Label Printer	0	0.0	
		No Printer Activity				
LoftwareLPS	Loftware LPS Printer - Please	Label	Label Printer	0	0.0	
		No Printer Activity				
noprint		HPLJ4SI	PCL	5	11.6	
	SYSADMIN	System Administrator				
Zebra	Zebra Label Printer	Label	Label Printer	0	0.0	
		No Printer Activity				

As this report references information in the [fnd\\_concurrent\\_requests](#) table, the amount of data available is dependent on your site’s concurrent requests purging policy.

The variable ‘sample days’ is used to set the number of day’s history in the report.



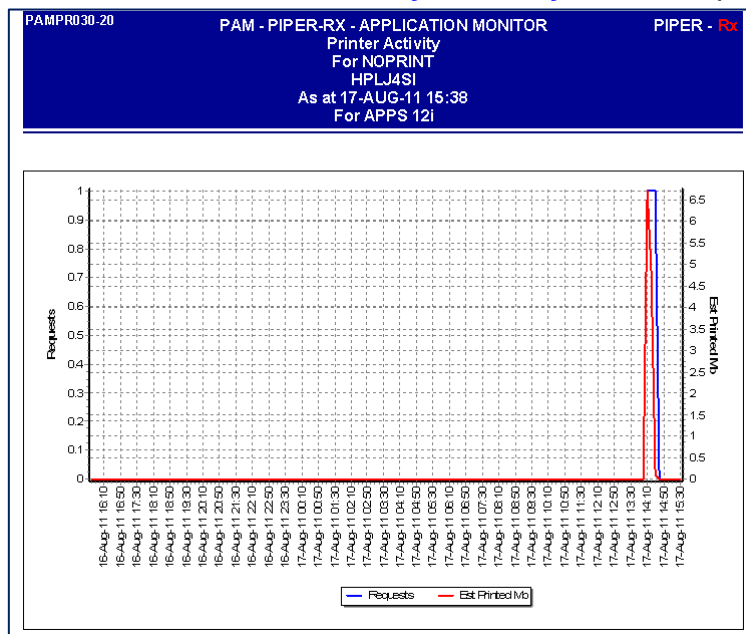
## 5.5 Printer activity chart

Where would we be without a chart or two...? 😊 **PAMreports** - Printers **PAMPR030 Printer Activity Chart By Printer** both charts and lists the number of requests and estimated print size (Mb) in 10 minute intervals for the selected number of days.

**Note:** Due to the large number of calculations required for this report (report performance) the report history days limited to the last 10 days

This chart could be used to identify printing patterns that may affect the overall printing performance (refer section 2 of this tutorial).

Example **PAMPR030 Printer Activity Chart by Printer** report page 1



Example **PAMPR030 Printer Activity Chart by Printer** report page 2

PAMPR030-20 PAM - PIPER-RX - APPLICATION MONITOR PIPER - Rx			
Printer Activity For NOPRINT HPLJ4SI			
As at 17-AUG-11 15:38 For APPS 12i			
Start Time	End Time	Printed Requests	Est Printed Mb
17-Aug-11 15:30	17-Aug-11 15:39	0	0
17-Aug-11 15:20	17-Aug-11 15:29	0	0
17-Aug-11 15:10	17-Aug-11 15:19	0	0
17-Aug-11 15:00	17-Aug-11 15:09	0	0
17-Aug-11 14:50	17-Aug-11 14:59	0	0
17-Aug-11 14:40	17-Aug-11 14:49	0	0
17-Aug-11 14:30	17-Aug-11 14:39	1	0
17-Aug-11 14:20	17-Aug-11 14:29	1	5
17-Aug-11 14:10	17-Aug-11 14:19	1	7
17-Aug-11 14:00	17-Aug-11 14:09	0	0
17-Aug-11 13:50	17-Aug-11 13:59	0	0
17-Aug-11 13:40	17-Aug-11 13:49	0	0

As this report references information in the [fnd\\_concurrent\\_requests](#) table, the amount of data available is dependent on your site's concurrent requests purging policy.

The variable 'sample days" is used to set the number of day's history in the report.

### 5.6 Printed by printer

What has the printer been printing?

**PAMreports** - Printers **PAMPR031 Printed by Printer** lists all the requests that have been sent to the selected printer:

Example **PAMPR031 Printed by Printer** report

PAMPR031-20 PAM - PIPER-RX - APPLICATION MONITOR PIPER - Rx							
Printed Requests By Printer NOPRINT - HPLJ4SI							
Sample Period - 10 days							
As at 23-AUG-11 18:21 For APPS 12i							
Request Id	Completion Date	Requestor	Appn	Program Name	Copies	Est Mb	
4431183	17-Aug-11 14:33	SYSADMIN	FND	OAM Applications Dashboard Collection	1	0.1	
4431182	17-Aug-11 14:22	SYSADMIN	FND	OAM Applications Dashboard Collection	2	4.8	
4431181	17-Aug-11 14:12	SYSADMIN	FND	OAM Applications Dashboard Collection	2	6.7	
<b>PAM large print request threshold (Mb): 5</b>							

The **PAM** large print job threshold value for the selected printer will be displayed at the bottom of the report.

As this report references information in the [fnd\\_concurrent\\_requests](#) table, the amount of data available is dependent on your site’s concurrent requests purging policy.

The variable ‘sample days’ is used to set the number of day’s history in the report.

### 5.7 Printed by printer for a selected period

Whereas **PAMreports** - Printers **PAMPR031 Printed by Printer** list a large number of requests, you can use the **PAMPR032 Printed by Printer – Period** report to limit the information to all printed requests for a selected printer between two date and time values:

Example **PAMPR032 Printed By Printer – Period** report

PAMPR032-20		PAM - PIPER-RX - APPLICATION MONITOR Printed Requests By Printer - Period NOPRINT - HPLJ4SI				PIPER - Rx	
Sample Period: 16-Aug-11 (Tue) 07:00 to 17-Aug-11 (Wed) 22:21 As at 23-AUG-11 18:27 For APPS 12i							
Request Id	Completion Date	Requestor	Appn	Program Name	Copies	Est Mb	
4431183	17-Aug-11 14:33	SYSADMIN	FND	OAM Applications Dashboard Collection	1	0.1	
4431182	17-Aug-11 14:22	SYSADMIN	FND	OAM Applications Dashboard Collection	2	4.8	
4431181	17-Aug-11 14:12	SYSADMIN	FND	OAM Applications Dashboard Collection	2	6.7	
<b>PAM large print request threshold (Mb): 5</b>							

The **PAM** large print job threshold value for the selected printer will be displayed at the bottom of the report.

As this report references information in the [fnd\\_concurrent\\_requests](#) table, the amount of data available is dependent on your site’s concurrent requests purging policy.

## 5.8 Printer Usage by Requestor

**PAMreports** - Printers **PAMPR033 Printed by Requestor** lists all printed reports for a selected user account (requestor):

Example **PAMPR033 Printed by Requestor** report

Request Id	Completion Date	Appn	Program Name	Copies	Est Mb
<b>noprnt</b>					
4431183	17-Aug-11 14:33	FND	OAM Applications Dashboard Collection	1	0.1
4431182	17-Aug-11 14:22	FND	OAM Applications Dashboard Collection	2	4.8
4431181	17-Aug-11 14:12	FND	OAM Applications Dashboard Collection	2	6.7

As this report references information in the [fnd\\_concurrent\\_requests](#) table, the amount of data available is dependent on your site's concurrent requests purging policy.

The variable 'sample days' is used to set the number of day's history in the report.

## 6 Disclaimer

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