



# GoPrint Dynamic Printing

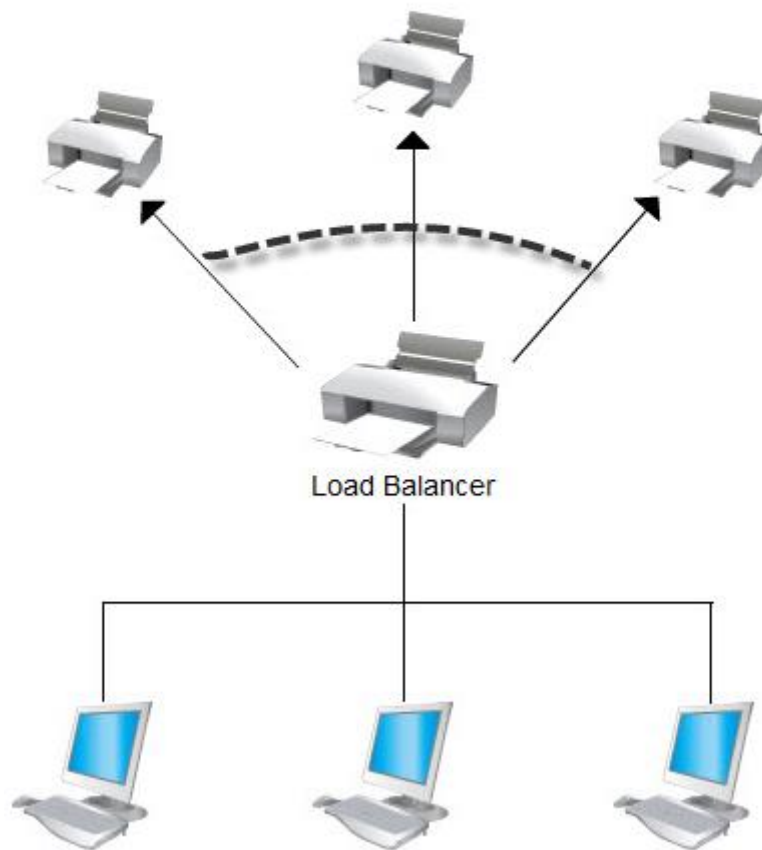
## Load Balancing and Follow Me Printing

### Load Balancing

With GoPrint Load Balancing, users print to a single printer installed on their computer called a Load Balancer. Print jobs are then equally distributed to each of the printers in the Load Balancing Set.

Using the printers SNMP fault detection signals, GoPrint can determine if there are; paper jams, low toner, busy printers, or when a printer is offline, and reroute jobs to the next available printer.

## Load Balancing





## Step 1- Enable a Load Balancer Queue

1) Create a new printer on the GoPrint print server to be your Load Balancer. It's not a "real" printer but a virtual queue; this is the one users will be printing to from their lab workstations.

- Use an LPT port
- Share the printer and create a user-friendly name
- Must use the same print drivers as the "real" queues

Mac/Linux: edit your /etc/lpd/printcap or /etc/printcap config file and add a printer.

The new Load Balancer queue is displayed; double-click its icon to enter its properties:

**Print Servers**

New Load Balancer queue, double-click to enter its properties

DesignjetT1120ps4 0m Smith\_BW2 0m SmithHall SmithHall-2 0m SmithHall-3

**General** Settings Page Counters  
SNMP Banner Options ACL Permissions

**General**

Print Server testlaptop

Queue Name SmithHall

Copy Settings From [dropdown]

Wait Time

Page Count

**Settings**

Status Active

Printer Type Load Balancer

Price Sheet Assign

**Save**

Status: Active  
Printer Type: Load Balancer  
Price Sheet: Assign

Active

Load Balancer

Load Balancer  
Real Printer



## Step 2 – Enable SNMP Fault-Detection

Navigate to the Properties sheet for each print queue and under SNMP enter its IP address in the Printer IP/Hostname field.

Save

Home > testlaptop

### SmithHall Properties

General Settings Page Counters  
Banner Options ACL Permissions

#### SNMP

Printer IP/Hostname: 10.10.1.2  
SNMP Port: 161  
SNMP Community Name: public  
Printer Status Message: Ready

Save Delete

## Step 3 – Create a Load Balancing Group

Go to: Printing – Load Balancing



The Load balancer Print Server listing appears:

Home

### Load Balancer Print Servers

Select a print server to configure its load balancing and decision-based routing setup.

Print Servers
server



## Step 4 – Add Print Queues to the Set

Click the green plus icon for each queue you wish to add to the load balancing group:

### Load Balance Groups

Print server **testlaptop** load balancer groups are shown below. Each group represents a virtual printer that users should use when printing. Print jobs are load balanced across the associated real printer queues for that group. Each group may be optimized for either availability (time spent idle) or usage (pages printed). Each real printer may have a rule and page speed adjustment in order to positively or negatively favor that printer.

Group: **SmithHall**      Optimize for

Print Queue	Auto Delete Rule	Page Counter	Wait Time	PPM	Rule	PPM +/-	Remove
No print queues belong to group SmithHall.							

### Regular Print Queues

Print queues that are not yet part of a load balancing group may be added to a group using the form below.

Print Queue	Add to Load Balancer
<a href="#">DesignjetT1120ps44in</a>	SmithHall <input style="background-color: #e6f2ff; border: 1px solid #ccc; padding: 2px 5px;" type="button" value="+"/>
<a href="#">Smith_BW2</a>	SmithHall <input style="background-color: #e6f2ff; border: 1px solid #ccc; padding: 2px 5px;" type="button" value="+"/>
<a href="#">SmithHall-2</a>	SmithHall <input style="background-color: #e6f2ff; border: 1px solid #ccc; padding: 2px 5px;" type="button" value="+"/>
<a href="#">SmithHall-3</a>	SmithHall <input style="background-color: #e6f2ff; border: 1px solid #ccc; padding: 2px 5px;" type="button" value="+"/>
<a href="#">T770ps44in</a>	SmithHall <input style="background-color: #e6f2ff; border: 1px solid #ccc; padding: 2px 5px;" type="button" value="+"/>

Click the Plus icon to select the queues you want to be members of the Load Balancing set



Once all queues are added, your Load Balancing set appears:

- 1) **Optimize For:** Select the default of Availability
- 2) **Rule and PPM +/-:** leave the defaults.

### Save Changes

Group: **SmithHall**      Optimize for: Availability

Print Queue	Auto Delete Rule	Page Counter	Wait Time	PPM	Rule	PPM +/-	Remove
<a href="#">Smith_BW2</a>	(none)	0	0m	30	(None)	0	
<a href="#">SmithHall-2</a>	(none)	0	0m	30	(None)	0	
<a href="#">SmithHall-3</a>	(none)	0	0m	30	(None)	0	

Reset

### Rules and PPM (optional, not required)

Under the Load Balance Groups properties sheet, you can customize the way in which printers receive jobs. The algorithm uses a combination of pages per minute (ppm) and time to idle (tti) to decide which printer to send the job too.

For example, setting the ppm count to higher settings as compared with the printers in the load balancing group, print jobs would be directed to print to that particular queue.

You can also modify Rules that have been defined and the ppm settings to customize how you wish to handle printers using the load balancer.



## Step 5 - Assign the Set to the Appropriate Print Release Station



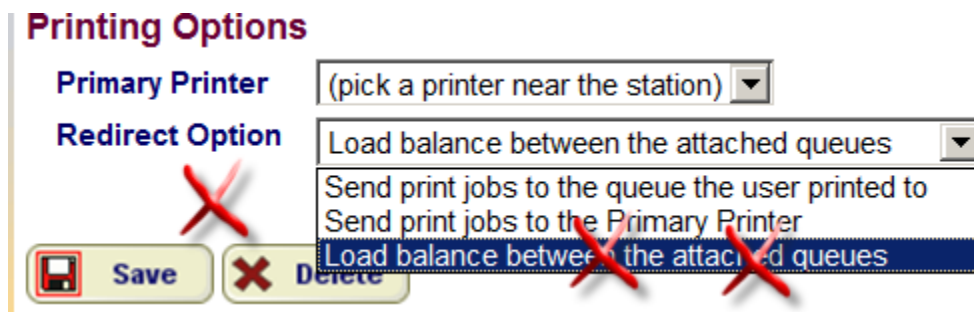
Add the queues, including the Load Balancer, to the Print Release Station Queues section in Control Center.

**Save**

- server/Canon** (Load Balancer)
- server/Commons** (Real Printer)
- server/Computer\_Lab** (Real Printer)
- server/Library** (Real Printer)
- server/Library\_2nd\_floor** (Real Printer)
- server/Student\_Hall** (Real Printer)
- server/hp1320** (Real Printer)

## Warning!

Do not select the "Load balance between the attached queues" option under the Print Release Station Printing Options. The features listed here are designed for Follow Me Printing as outlined on the following page.







## Follow me Printing

### How it works!

An end-user sends a print job to a GoPrint managed print queue from their workstation in the library and decides to pick it up at a GoPrint Release Station in the computer lab location near their classroom on the other side of campus. At this point, the user has the option to release the print job from any enabled location.





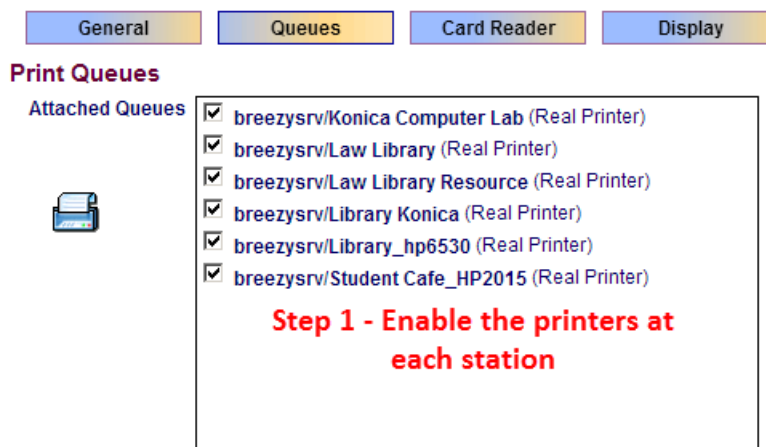
Requirements:

1. The physical devices must be similar or print drivers for each printer much match. Ex: PS, PCL drivers, color vs black white drivers.
2. The document print output options must be supported on the designation printer. Ex: duplex, oversize, multiple copies.
3. Each Print Release Station involved in Follow Me Printing must have the print queue enabled for each location; in contrast to the recommended settings of enabling only the printer adjacent to the print release station.
4. Does NOT require Load Balancing queues.

**Step 1 – Enable the print queue at each print release station**

With standard GoPrint configurations, it’s recommended to enable only the printers that are local or near the physical Print Release Station, but with Follow Me Printing we want to achieve the opposite results by offering print jobs sent from any printer to display at any enabled Print Release station.

**Reminder:** each printer enabled at the station MUST be of like print driver and supported output formats or rendering issues will occur!







## Step 2 – Select a primary Printer for that Station

Our goal here is select a printer that is physically near the Print Release Station and make that Primary Printer. Then we want to make sure all print jobs sent from other printers get redirected to the primary printer.

1. Select a Primary Printer
2. Redirect Option: Send print jobs to the primary printer

**Printing Options**

Primary Printer: breezysrv/Law Library **1.**

Redirect Option: **2.**

- Send print jobs to the Primary Printer
- Send print jobs to the queue the user printed to
- Send print jobs to the Primary Printer
- Load balance between the attached queues

Save Cancel